

DOCUMENT RESUME

ED 350 796

EC 301 609

AUTHOR Webb, Gertrude M.
TITLE Tuning in to Learning. Third Edition.
PUB DATE 91
NOTE 139p.
PUB TYPE Guides - Classroom Use - Instructional Materials (For Learner) (051)

EDRS PRICE MF01/PC06 Plus Postage.
DESCRIPTORS Brain Hemisphere Functions; *Cognitive Style;
*Dropout Prevention; *High Risk Students; Learning
Modalities; Learning Problems; *Learning Processes;
*Learning Strategies; Secondary Education; *Self
Concept; Self Evaluation (Individuals)

ABSTRACT

This document presents a series of seven notebooks written to assist students at risk of becoming school dropouts due to learning problems. The notebooks explain what learning is, the student's role in the learning process, tools available to learners, how a particular student may learn best, which areas of learning need to be strengthened, and learning strategies. The notebooks are based on learning research findings from the Program for Advancement of Learning which was begun at Curry College in Milton, Massachusetts. The notebooks are titled "How I Prefer To Learn," "My Brain," "My Self," "The Tools Which Help Me Learn," "My Learning Profile," "Strategies To Empower My Learning," and "Where I've Been, Am, and Am Going." The notebooks contain background information, self-evaluation activities, and learning activities. Sample activities include self-assessment of learning styles, academic skills, and brain hemisphere functioning; tables to organize tasks to be completed; time management tools; and use of mnemonics. (JDD)

* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *

ED350796

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

☒ This document has been reproduced as
received from the person or organization
originating it.

☐ Minor changes have been made to improve
reproduction quality.

• Points of view or opinions stated in this docu-
ment do not necessarily represent official
OERI position or policy.

TUNING IN TO LEARNING



Gertrude M. Webb, Ed.D.

2

"PERMISSION TO REPRODUCE THIS
MATERIAL HAS BEEN GRANTED BY

Gertrude M. Webb

BEST COPY AVAILABLE

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)."

EC 301609

TUNING IN TO LEARNING



Gertrude M. Webb, Ed.D.

TUNING IN TO LEARNING

Gertrude M. Webb, Ed.D.



Third Edition

© Copyright 1989, 1990, 1991, All rights reserved

Gertrude M. Webb, Ed.D.

Waltham, Ma. 02154.

Table of Contents

Notebook

HOW I PREFER TO LEARN	.I
MY BRAIN	II
MY SELF	III
THE TOOLS WHICH HELP ME LEARN	IV
MY LEARNING PROFILE	V
STRATEGIES TO EMPOWER MY LEARNING	VI
WHERE I'VE BEEN, AM, AND AM GOING	VII

ACKNOWLEDGEMENT

These notebooks are dedicated to my colleagues, members of the Faculty of PAL (Program for the Advancement of Learning) at Curry College and to our college-able, learning-disabled students whose competence, independence and effectiveness are nurtured at the Learning Center. The Faculty at PAL labors daily seeking and discovering better ways to create a climate in which students' learning becomes successful. Students share with us what really works for them and what gets in the way of their success. Their openness in answers to the straightforward question "How do you learn?" gives us insight into productive learning strategies for all students.

Curry's Learning Center where an atmosphere of cooperative sharing of ideas exists is the crucible in which these notebooks were born. The ideas and strategies suggested are the synthesis of our combined efforts over the past 19 years of the design and development of PAL.

A special thank you to Dr. Edward Welling who has served as a sounding board for my messages, critiquing them, suggesting additions and deletions as he proofed these notebooks making them more attractive to the adolescent learner. And to Ellen Pittman and Mary Ann Ferrante who have spent innumerable hours deciphering and recording my handwriting so that you, the reader, could have the benefit of my thinking.

For any errors of commission or omission I take full responsibility. I am hopeful that having read and used these notebooks you will share your reactions and suggestions for improvements with me.

Dear Student,

Though we have never formally met, I feel I know you. You represent the many thousands of students sitting in American classrooms daily trying to learn the material being taught them. Try as many students do, they do not seem to get the desired gold stars for their efforts. Others who also try but do not achieve as they had hoped quit along the way. They're called "dropouts."

Hardly a day goes by that concern is not expressed in our newspapers or on our television about the increasing numbers of school dropouts. Numerous books have been written advising teachers and parents how to motivate such students back into our schools.

I have trouble with this attitude towards such school learners. It assumes that the teachers or parents can do something to these learners to correct their wrong attitudes toward school. It treats learners as if they have problems that can be remediated and that then all will be well.

I think that approach of "band-aiding" any gaps in your learning neither recognizes recent research on the brain and learning nor respects learners as active participants in their learning.

Examine if you will some of the things school dropouts learn outside of school, e.g. how to fix a complicated broken motor; how to get along with peers of similar interests; how to lend a hand to those less able than themselves. You will then realize that there is nothing wrong with their abilities to learn; that as Benjamin Bloom, noted University of Chicago researcher, has so well stated "All children can learn." I go one step further expanding Dr. Bloom's statement, adding to it, children's innate desire to learn and saying "All children begin their schooling wanting to learn."

Then what happens? Why do so many of our students become dropouts (pushouts) sitting in our classrooms not thinking, just waiting until they may leave legally right after their sixteenth birthdays? I wish I could hear your answers to these questions.

In any event, whether you are in the first group of persistent strugglers who stick it out to the bitter end or in the second group of high school dropouts, I feel I must talk to you. I believe I have some ideas that will make you a more effective classroom learner. The ideas I'd like to share with you are the product of many years of study of the medical, psychological and educational research on the subject "How We Learn". More importantly I have had the opportunity to test this research, to put it to practice in the Program for Advancement of Learning which I started at Curry College in Milton, Massachusetts just about when you were born (1970).

PAL, as the program is affectionately known, has over the years helped many college able though language disabled students become successful in their college classrooms. It has done this by making the program participants aware of how they best learn so that they can use this knowledge effectively. It has taught them strategies to help them bring their areas of difficulty closer to their areas of strength. It has

given them the tools to help themselves move towards competence and independence. It has given them respect for their own thinking, hope and confidence so that they succeed at learning.

It has also been my pleasure to help many teachers in the schools of Boston and its suburban communities help students in their classrooms put this understanding of self as a learner to work. Through these experiences I have built a body of knowledge which I want to share with you. Therefore this series of seven note-books titled "Tuning in to Learning" was written. When you have mastered the keynotes in each notebook, you will understand:

- what learning is
- your role in the learning process
- what tools you have as a learner
- how you learn best
- which areas of learning you need to strengthen
- several learning strategies you may use to empower you in your learning.

Please remember that "Tuning in to Learning" is written primarily for You, the Learner. The reason it is written primarily for you, not for your teacher or your parent is because I am tired of hearing parents say, "Teachers need to motivate you" and teachers saying, "Parents should send you to school motivated to learn." I really believe that all school learners start out wanting to learn, that those who don't succeed at school tasks lose hope for success and then quit on school learning. At that point neither teacher nor parent can help one learn.

If you are going to be successful at school learning, hope for success must be re-established. To begin that process you need to understand how you learn, where you are successful, where you get in trouble in learning and what you can do about it. That is why "Tuning in to Learning" was written for you. Feel free to write in it, to respond to questions put to you, to underline important points, to mark it up as you see fit.

Remember, you are the Learner. Neither your parent nor your teacher can learn for you. If you care to share some of these learnings with your parent or teacher, well and good. That's your choice. Enough of the introduction. Let's get on with the keynotes which tune you in to learning. There are seven books in this series.

Cordially,

Gertrude M. Webb, Ed.D.

Gertrude M. Webb, Ed.D.

NOTE BOOK I

How I Prefer To Learn

Keynotes to help you understand learning.

You have been learning for a long, long time. You surely know a great deal about the way one learns. Suppose today, (insert date) __/__/__, you state what you think learning is by finishing the following sentence:

Learning is:

If you were to look up Learning in Webster's Seventh New Collegiate Dictionary, you would find this definition of learning, "to gain knowledge or understanding of, or skill in by study, instruction or experience."

Anything like your definition?

Here's another definition written by one of my students.

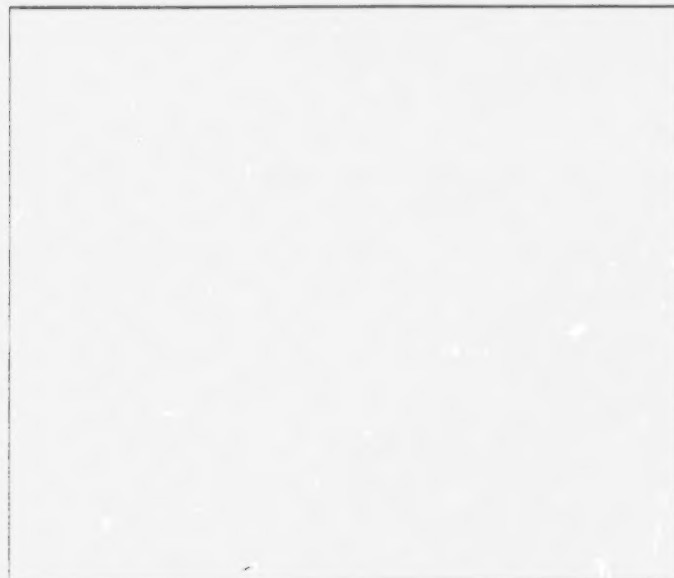
"Learning is fitting a new concept into my existing knowledge or world. I integrate a new concept by examining it cautiously and skeptically to see how and where I want it to fit in. I try it on for size."

✓ **KEYNOTE 1:** Like this student's definition? I like it better
 •• than the dictionary definition because it speaks to who is in
 charge of one's learning. It describes you, the learner, as the
 actor in the learning process. It recognizes learning as an ac-
 tive process.

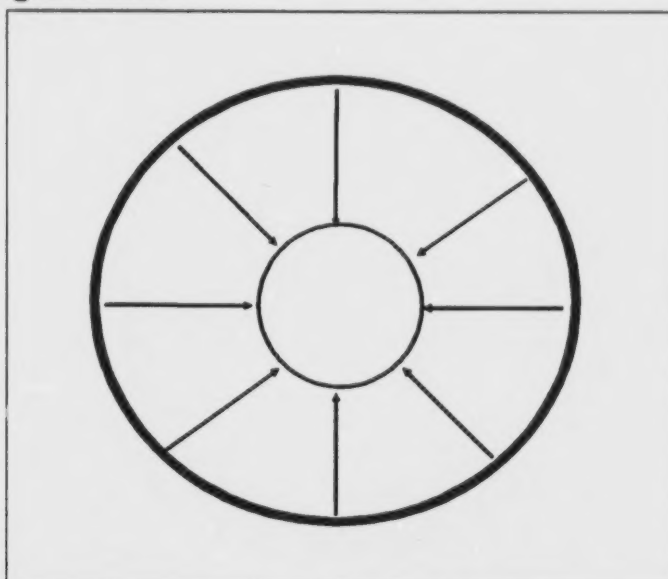
✓ **KEYNOTE 2:** Simply stated learning is a way you and I have
 •• of finding out about the world in which we live. It is our way
 of finding the rhythms, the patterns, the structures, the order
 of our universe. It is a way of "tuning in" to one's world so
 that one can function successfully.

✓ **KEYNOTE 3:** The idea of your being in charge of your own
 •• learning might be easier to understand if we visualize it. To
 do this, draw a circle the size of a doughnut in the box below.
 Suppose that the circle represents your world.

In the center of your world draw a smaller circle the size of a
 quarter. Put your own name in that circle. Now you should
 have a picture of you in the center of your world.

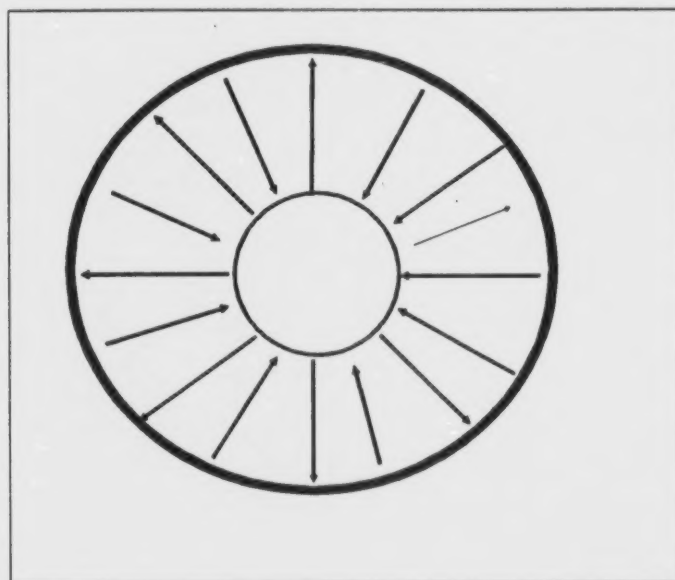


♪ **KEYNOTE 4:** All around you is information for you to look at, touch, listen to, smell or see. Robert Louis Stevenson, a nineteenth century author, wisely observed that "the world is so full of a number of things, we all should be as happy as kings." To represent the wealth of information around you, draw arrows coming from the edge of your larger circle (your world) towards you in the center small circle. Your world with you being bombarded by all kinds of information should look something like this:



Now what are you going to do about this? Stand there and be overwhelmed by all the information coming towards you? Do nothing about this bombardment? **No-way!**

♪ **KEYNOTE 5:** That's when you become active and reach out to take in those bits of information you want. Back to your drawing. Place arrows going from you to the information you actively choose to learn. Now you and your world should look something like the next diagram.



Perhaps you're more artistic than I. If so, feel free to add color to your drawing distinguishing information you actively reach out to take in from that which your world is offering you. Go ahead. Color coding may help you see this learning business as a two-way process, an interactive one.

Do you begin to see that you are in charge of your learning; that you take in what you want to learn of what your world offers you; that you shut out what you don't want? Perhaps you learned to fix a broken motor while you didn't learn the multiplication table of 8's.

How come? Which task is more complicated? Yet, which one might you prefer to learn?

Daily you choose to learn what you'd like to learn of the thousands of possibilities about you. Today's newspaper described a young man who lived in a drug-ridden area of a large city who was asked by a policeman why he, being able bodied, didn't go get a job. His answer was "I earn \$200 a day watching for you cops and telling the drug pushers when you

are coming. Why should I work?" He'd made his choice. We all do even though most of us make less dangerous ones. We choose to learn to swim, to ride bikes, to play card games, to do the things that make us feel good because we do them easily and well.



KEYNOTE 6: We will tackle the more difficult tasks when we believe we can accomplish them and when we see possible rewards for our efforts.

So what do you actively choose to learn? Let's note your likes and dislikes, your learning preferences, on the next few pages. Perhaps they will provide us with clues to your learning strengths and areas in need of strengthening.

To get the best results from your recordings, do only one page each day over a five day period. Doing them at the suggested pace will prevent possible boredom or weariness and will provide a more accurate record.



KEYNOTE 7: When recording your likes and dislikes, your learning preferences, give the first thought that comes to your mind. Do not ponder long over your answers. There are no right or wrong answers. The answers you give are merely your answers. Since each of us is as different as the flowers in a garden, the animals in a jungle or the fish underwater in the sea, so should our answers differ. Their differences show how uniquely each of us learns.

Finding your uniqueness will help you better understand how you learn. So let's go with your recording as honestly as you can on the five exercises that follow:

KEYNOTE 8: DAY 1: THINGS I LIKE TO DO

Directions: Write ten things you like to do. Then read the rating codes at the bottom of the page. Check the columns that apply to each activity on your list. You may check one column or several of them for each item. Draw a circle around the five things you like to do best. Copy the list of your five preferences onto the page entitled My Learning Preferences which you will find on page I - 11.

	A	B	C	D	E
1. _____					
2. _____					
3. _____					
4. _____					
5. _____					
6. _____					
7. _____					
8. _____					
9. _____					
10. _____					

RATING CODE:

I've done this once - A

I do this often - B

I do this with friends - C

I do this alone - D

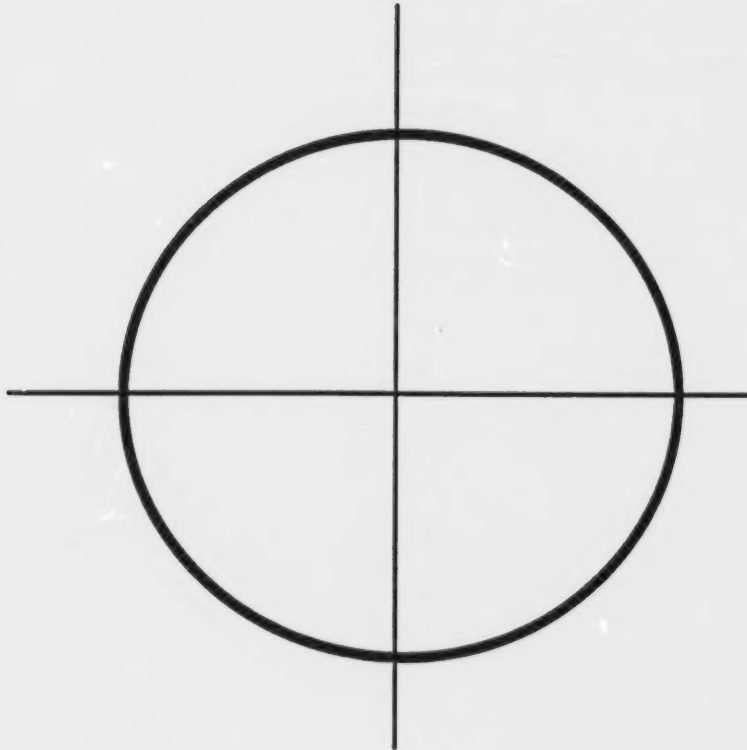
I will enjoy doing this five years from now - E

 KEYNOTE 9: DAY 2: HOW I SPEND A TYPICAL DAY

Directions: On the next page you will find a circle divided into four equal parts known as quadrants. In each quadrant you are to record your activities over a six hour period on a typical day.

Begin at the top of the center line labelling it the hour nearest the current time, e.g. If it is now 10:30 a.m. place 11 a.m. at the top of the center line. Add 6 hours labelling the right hand line 5 P.M., the center bottom 11 P.M. and the left line 5 A.M.

In each quadrant record what you do and how long you did it. Suggested categories are below. You may add your own categories to the list. Your estimates of time need not be exact, but they should add up to 24 hours. This record should give you a visual picture of how you usually spend your time.



How many of your 24 hours did you spend:

sleeping, going to class, eating, studying,
 working, earning money, doing chores, playing sports,
 doing things with friends, doing things alone, reading,
 watching TV,
 doing things with your family?

At another time, in Notebook VI, at Keynote 19 we will evaluate the way you spend your time in relation to achieving your goals.

 KEYNOTE 10: DAY 3: LEARNING / SELF ASSESSMENT

Directions: Rate how you learn both in and out of school by checking the appropriate number in each column (1 = poor, going to 6 = super).

	1	2	3	4	5
LOOK					
<u>IN SCHOOL</u>					
<u>OUT OF SCHOOL</u>					
LISTEN					
<u>IN SCHOOL</u>					
<u>OUT OF SCHOOL</u>					
DO					
<u>IN SCHOOL</u>					
<u>OUT OF SCHOOL</u>					
TALK					
<u>IN SCHOOL</u>					
<u>OUT OF SCHOOL</u>					
MOVE					
<u>IN SCHOOL</u>					
<u>OUT OF SCHOOL</u>					
Murphy / Talabach					

 KEYNOTE 11: DAY 4: WEBB - CURRY LEARNING ASSESSMENT Student's Perceptions

Directions: Fill in the blanks:

LIKES	DISLIKES
<i>At School</i>	
<i>At Home</i>	
<i>In My World</i>	

THINGS I CAN DO	THINGS I CANNOT DO

 KEYNOTE 12: DAY 5: INFORMAL LEARNING STRENGTHS

Directions: Have you thought of all the things you really enjoy doing as possible learning strengths? Check this list.

Do you like to listen to a story? __Y __N;

Tell a story? __Y __N;

Read stories? __Y __N

Do you like to watch a story in a movie, on TV? __Y __N;

Tell a friend about the story you have seen? __Y __N

Do you like to draw pictures, to doodle? __Y __N

Do you daydream? __Y __N

Do you like to work with friends solving problems? __Y __N;

Fixing a motor? __Y __N;

Designing a model? __Y __N

Do you like to help younger children? __Y __N;

Senior citizens? __Y __N;

Handicapped people? __Y __N

Do you like to work on community projects (keep our town clean day, clean the pond, the river)? __Y __N

Do you like to see famous people? __Y __N;

Athletes? __Y __N; Artists? __Y __N; Inventors? __Y __N;

Civic leaders? __Y __N; President? __Y __N; Governor? __Y __N

 KEYNOTE 13: My Learning Preferences Date: __/__/__

1. _____

2. _____

3. _____

4. _____

5. _____

Can you now add five more learning strengths to your list?

6. _____

7. _____

8. _____

9. _____

10. _____

By this time you should have some sense of how you prefer to learn. Perhaps you are ready to look at how you approach more academic tasks as well as the way you learn generally. Let's see how you would like to learn and remember a telephone number e.g. 752-8309

Listen to the number once or twice and then repeat it? __Y
__N

Listen to the number once or twice, write it down and repeat it? __Y __N

Listen to the number once or twice, write it down, study it for a short time and then repeat it? __Y __N

Listen to the number once or twice, study it, be told you will be expected to dial it one hour later, then again the next day? __Y __N

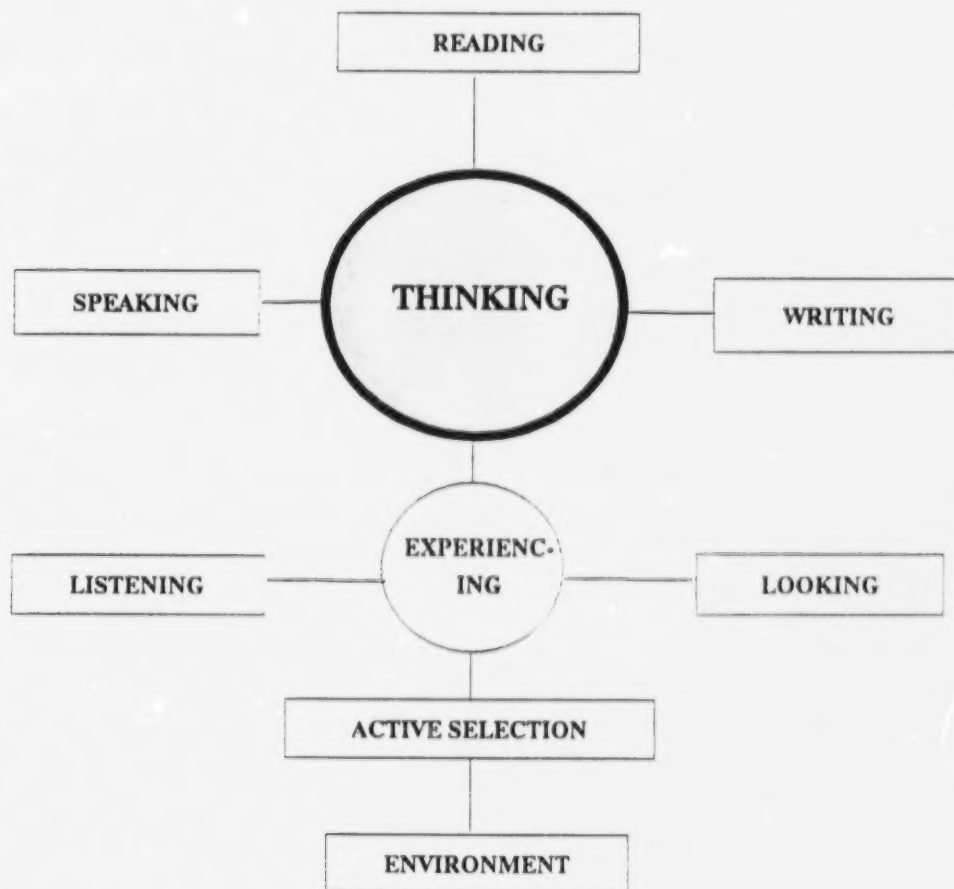
Be given the number in writing, and be told that you will be expected to dial the number when you know it, and again one week later? __Y __N

Be given the number on a slide or film, accompanied by a record that has the spoken number on it, a telephone, a telephone number game, a paper and pencil and be told, "Learn this number any way you want to, but tell us what helps you to know it." __Y __N

♪ **KEYNOTE 14:** Having thought through your preferred way for remembering, what do you conclude is your preference, listening, seeing, doing, -right away, after some time or: (write your preferred approach below)

On the next page please rate yourself on your listening, speaking, reading and writing skills by circling 1, 2, 3, or 4 as appropriate. The skills of listening, speaking, or reading and writing, called the language arts, are frequently measured in schools. Sometimes teachers are so intent on measuring these skills that they forget that underneath these skills lie one's more important ABILITIES, THINKING.

🎵 **KEYNOTE 15:** The diagram shows thinking as the very important foundation undergirding the language arts.



KEYNOTE 16: SELF-ASSESSMENT OF ACADEMIC SKILLS

Directions: From your own experiences rate your academic skills by placing a check in the appropriate column, use the following rating scale.

RATING SCALE:

HELP! A major disaster area! - 1

Definitely would like to improve - 2

Could be better but no major problem - 3

A definite strong point - 4

	1	2	3	4
LEARNING THROUGH LISTENING				
<i>Concentrating on what I'm listening to</i>				
<i>Understanding information presented orally</i>				
<i>Remembering what I've listened to</i>				
EXPRESSING MYSELF ORALLY				
<i>Putting into words what I want to say</i>				
<i>Remembering the exact words I need</i>				
<i>Speaking in front of others and in class</i>				
READING				
<i>Reading at an adequate rate of speed</i>				
<i>Figuring out unfamiliar words - decoding/meaning</i>				
<i>Picking out main ideas</i>				
<i>Knowing word meanings</i>				
WRITTEN EXPRESSION				
<i>Getting my thoughts on paper</i>				
<i>Writing complete, understandable sentences</i>				
<i>Writing clearly</i>				

(Adelizzi)

KEYNOTE 17: To evaluate yourself on this form find a picture you like. Write one paragraph describing the picture and another paragraph telling either what is going on in the picture or what you imagine might be going on. When you have completed your writing rate yourself 1, 2, 3, or 4 as suggested in the scale. The areas in which you have rated yourself 3 or 4 you may consider your learning strengths. Those areas in which you have rated yourself 1 or 2 are areas needing strengthening.

RATING SCALE:

straight description, no expansion = 1

limit expansion of ideas, many written language errors = 2

good ideas, 5 or fewer language errors = 3

excellent ideas and written language = 4

WRITTEN LANGUAGE ASSESSMENT

	1	2	3	4
<u>Ideas</u>				
<u>Vocabulary</u>				
<u>Sentence structure</u>				
<u>Paragraph structure</u>				
<u>Capitalization</u>				
<u>Punctuation</u>				
<u>Spelling</u>				
<u>Grammar</u>				
<u>Handwriting</u>				

By this time you should have some sense of how you prefer to learn academically, what your major learning strengths are. Please list five of your major strengths here:

1. _____
2. _____
3. _____
4. _____
5. _____

♪ **KEYNOTE 18:** It has long been known that each of us has his / her own preferred way of learning. Over the last twenty years psychological researchers have tried to identify and label these preferences which they call one's learning style.

♪ **KEYNOTE 19:** Depending on the researcher's method of observing and analyzing learning styles, you will find them labelled in many different ways. If the researcher were looking at the way we take in information through our senses, you may hear about visual, auditory, tactile - kinesthetic learning styles.

♪ **KEYNOTE 20:** If the researcher were more interested in observing the way we put our ideas together, you may hear learning styles labelled concrete or abstract. Other researchers interested in different approaches to problem solving called learning styles rigid or undisciplined, sequential or random, reflective or analytical, creative or intuitive, active or passive.

Enough of labels. there are as many learning style labels as there have been researchers in the field. Don't let yourself be confused. The important points to understand are that:

♪ **KEYNOTE 21:** Each of us does seem to have a preferred way of learning, his/her unique learning style;

♪ **KEYNOTE 22:** One's learning style is not superior to anyone else's just different;

♪ **KEYNOTE 23:** Once one knows his / her preferred learning style s/he is empowered to use it approaching problem solving in his/her preferred way, e.g. the visual learner approaches problems seeing the whole, distinguishing essential from non-essential parts from print or pictures. The auditory learner by contrast prefers to begin his / her problem solving by listening to others describe its distinguishing features;

♪ **KEYNOTE 24:** In each of us there is potential for stretching into other learning styles;

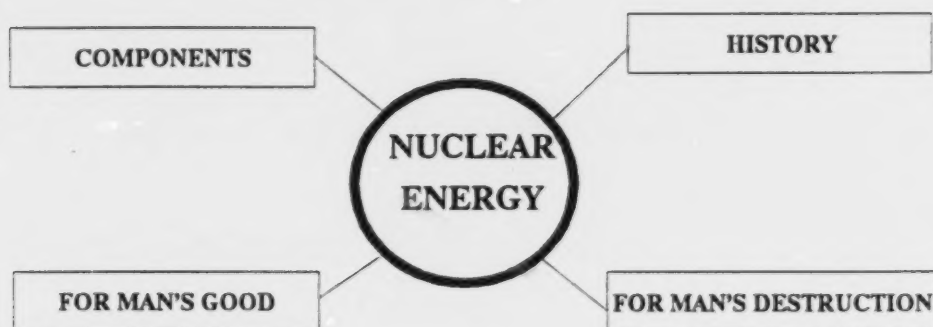
♪ **KEYNOTE 25:** The best learners use their preferred learning style as the beginning point for problem solving and then add other ways of looking at the problem to enrich their understanding.

By this time reflecting on your recorded learning preferences, your learning strengths you should be able confidently to complete the following sentence:

🎵 **KEYNOTE 26:** My preferred learning style is:

On the next page demonstrate how you would use your preferred learning style in solving the following problem. Your assignment for the next two weeks in social studies is to learn as much as you can about Nuclear Energy. The following example may help. Since I, Gertrude, prefer to learn visually, I will begin my search as follows:

- Look for pictures, graphs, diagrams in my textbook to help me better understand the ideas being presented.
- Look for newspaper stories and articles in the library related to nuclear fallout, e.g. Three Mile Island, Chernobyl.
- Find arguments for the need and the value of nuclear energy as we move into the 21st century. (contact Boston Edison for one).
- Having assembled all this relevant visual information I would sort it and make a web of the history and components leading to nuclear energy's development as well as of the current and future pro's and con's for its use. Such a web would look something like the following:



List what you plan to do to use your preferred learning style to solve a current school assignment or any problem you would like to solve on the next page. Good Luck. You will get better at this business the more you do it. Can you guess how much time Larry Bird has practiced to get as good as he is? Try it. You'll like it.

Since I, (insert your name) _____, prefer to learn by:

I will approach my problem, _____ by:

NOTEBOOK II

My Brain

In Notebook I, you discovered how you prefer to learn. Keep using your new "know-how" each time you begin to study, to problem solve and/or to do an assignment. The more frequently you use what you know about your learning preferences, the more effectively you will problem solve. Then you will be ready and able to stretch yourself to other ways of learning not necessarily your preferred learning style, but necessary for you to try on for size and possible for you to achieve.

When you've watched a carpenter come on his job, have you noticed that he brings his kit of tools with him; opens his kit; examines his tools, selecting the appropriate one for the job to be done? A good carpenter knows his tools well. He chooses wisely to solve the problems confronting him.

♪ **KEYNOTE 1:** In like fashion, when you come to your learning job, you bring with you two primary tools. Each one of us is born with two primary tools that make learning possible for us. Can you guess what they are?

1. _____

2. _____

Let me clue you. One is the most complex machine ever designed, more wonderful and intricate than any computer man

ever made. That's right. You guessed it. It's your BRAIN. In this notebook, I'd like to tell you how it came to be and what we know about its operations as it organizes the information you choose to take in from your world.

Have you guessed what the other primary tool might be, the one that fires your learning system; that energizes it so that your brain reaches out to learn what you want to know? It also helps you stay with a problem until you solve it. That's right. It's your SELF. I'm not going to discuss how your SELF works for you until Notebook III.

For each of your primary tools, your BRAIN as your organizer of information and your SELF as its energizer is worth a whole notebook and this one is devoted to your BRAIN.

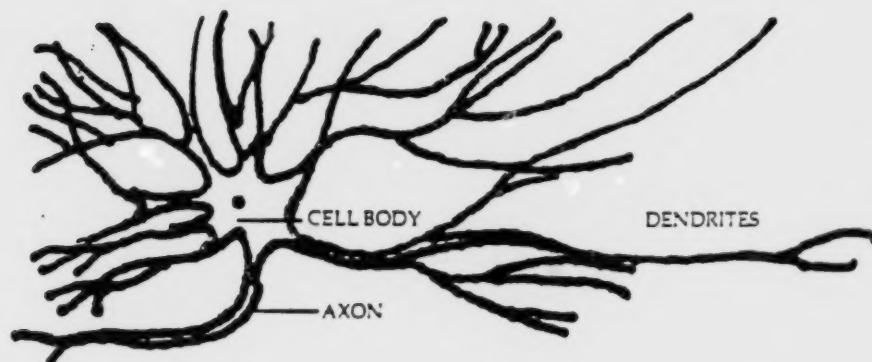
♪ **KEYNOTE 2:** However, the better you know how both your tools function, the more effectively you will use them to solve your problems; the better the job you will do of learning. This new knowledge should put you in charge of your learning. It should empower you.

Your Brain

♪ **KEYNOTE 3:** Your brain sitting atop your spine is wonderful. It is the most complex bit of matter in the universe. It is far more capable than computers which we think of as technological marvels.

♪ **KEYNOTE 4:** Start celebrating the many abilities your brain has. It has the power to activate you to reach out and take in information around you; sort that information; help you analyze it so you can learn what you choose to know; give you the foundation from which you make decisions and even plan for your future.

♪ **KEYNOTE 5:** Your brain, which is only about 3 pounds in weight, is made up of many thousands of cells. We call these cells neurons.



♪ **KEYNOTE 6:** Though our cells do not grow in number, yet, from them grow two different sets of branching systems (axons and dendrites if you'd like their technical names). When new information is taken in, newly grown axons float around in our heads looking for dendrites onto which they may hook themselves. The system operates something like trains do in a railroad yard coupling themselves together through a system of connectors (synapses and neurons, if you're into scientific terms).

(see drawing of axons and dendrites above)

Pretty remarkable system, don't you think?

♪ **KEYNOTE 7:** Even more remarkable! New axons and dendrites grow whenever we have new experiences. It is through their chemical connections that new learning is created. More experience, more brain growth; more basis for success in understanding of your world.

♫ **KEYNOTE 8:** Each of us has much more potential for brain growth than we use. We're told we use about 10% of what we have. No wonder the famous author Pablo Casals asks in his poem, entitled Reflections:

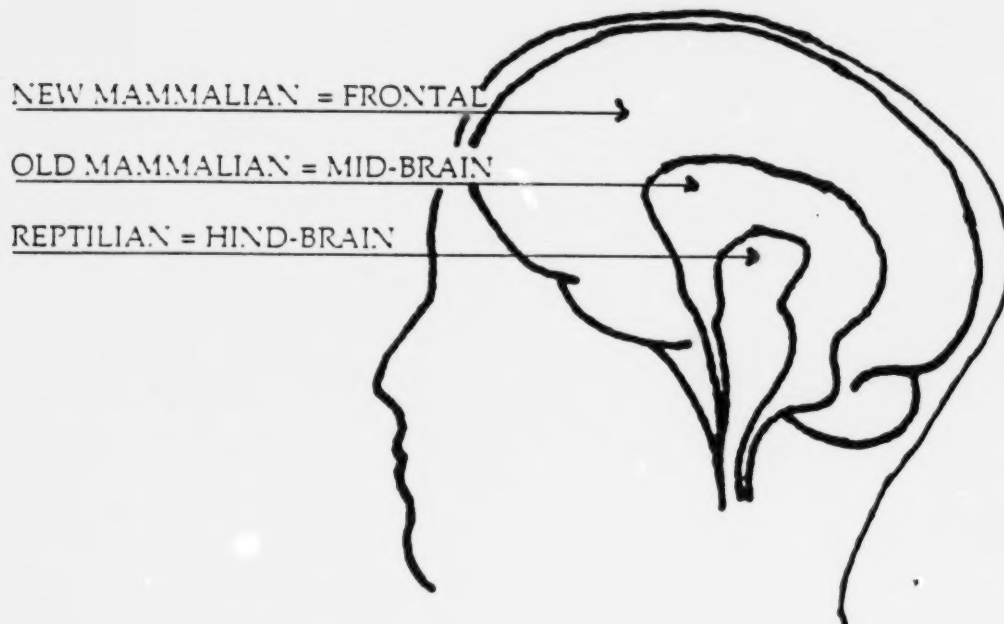
Do you know what you are?
You are a marvel.
You are unique.

In all of the world there is no other
exactly like you.
In the millions of years that have passed,
there has never been another like you.....

You may become a Shakespeare, a Michelangelo, a Beethoven

You have the capacity for anything.

♫ **KEYNOTE 9:** Man's brain has developed over time. Many ages ago, when man was still climbing in trees, he had a



brain whose primary job was to help him survive, to alert him to danger.

♪ **KEYNOTE 10:** Would you believe that the old brain, called the hind-brain and hidden deep inside of man's brain still is operating daily within us? It still alerts us going into action whenever we sense danger.

When you step off a sidewalk not having noticed a car coming your way, your hind-brain goes to work causing you to freeze on the spot or run to beat the oncoming car. In similar fashion, it works when you are in a classroom worrying that you may be called on and embarrassed in front of your peers because you're not sure of the answer. That hind-brain sensing your fear, your danger, may freeze your thinking at that point. Surely you will come out a loser.

Remember the test you studied for, got to the exam, and knew nothing even though you had studied for hours before the test. Your worry about the exam, your fear of failure had put your hind-brain into action and had shut down the thinking part of your brain. There are strategies you can learn to control your hind-brain's activities. We'll talk more about them in Notebook VI, Keynote 55.

♪ **KEYNOTE 11:** The hind-brain doesn't operate only when you are in danger. It also has the ability to let information into your brain when you are relaxed. Then it helps you attend to what interests you or shut out what doesn't. It acts as a gatekeeper for incoming information. Pretty powerful piece of equipment, that hind-brain you have as a learning tool. And you have more.

♪ **KEYNOTE 12:** Man's need changed when man came out of the trees and had to hunt for food; build a shelter for himself and his loved ones. As man's needs changed, so did his brain. A new area called the mid-brain formed around the hind-brain. See diagram above. Try to copy it.

🎵 **KEYNOTE 13:** Within the mid-brain lies the limbic system, seat of our emotions and sex drives. Reacting to the information allowed in by the hind-brain, the mid-brain enjoys, dislikes, loves, hates, is indifferent or affectionate to the things, people, and images being processed.

Sometimes it makes us do things we can't explain. We say, "I didn't mean it. I couldn't help it. I got so angry at him I had to hit him." Shakespeare recognized how powerful the limbic system was on our behavior when he wrote in *The Merchant of Venice* "The brain may devise laws for the blood, but a hot temper leaps o'er a cold decree."

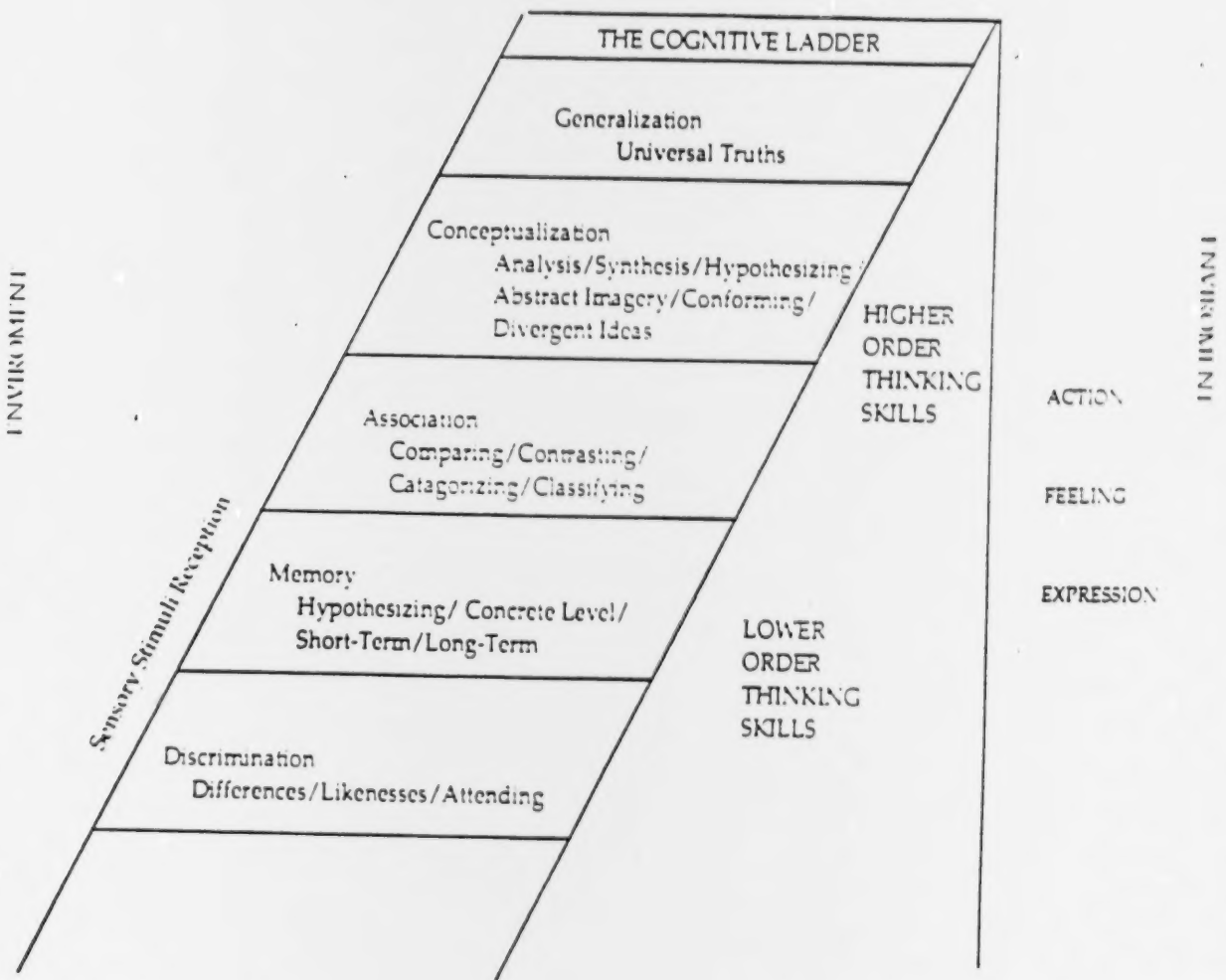
🎵 **KEYNOTE 14:** The forebrain, the newest section of man's evolving brain, surrounds the two earlier brains. Notice where it's located in the drawing above towards the front of your head. Touch it, feel it.

🎵 **KEYNOTE 15:** The forebrain performs the highest functions of our thinking, abstracting into thought and words the information we have chosen to let into our brains, sorting it out, comparing and contrasting it, relating it to what we already know, analyzing it before synthesizing and readying it for output.

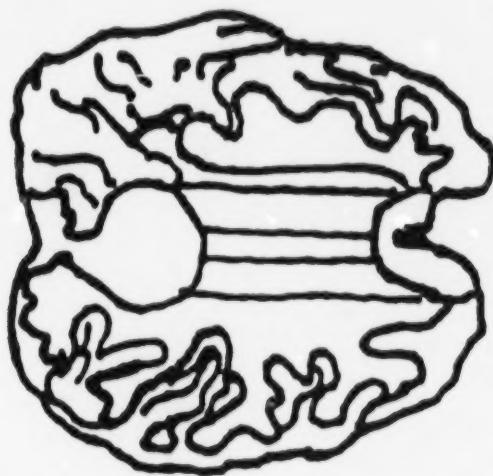
🎵 **KEYNOTE 16:** It is the brain with which schools and society are most concerned as they try to improve man's ability to learn, to think, to problem solve and to create.

🎵 **KEYNOTE 17:** The forebrain's work undergirds what we say, write, read and do. The technical name for its work, for its thinking is cognition. Say that word a few times. Make it yours. For that's the process you're going through as you read and think along the model on the following page.

🎵 **KEYNOTE 18:** Share the model with a friend. Discuss it. Question it. Improve it. Let me know what you are doing with it.



- ♪ **KEYNOTE 19:** The forebrain is composed of two halves called hemispheres connected by a network of fibers.



- ♪ **KEYNOTE 20:** To identify the hemispheres they have been labelled by their location in the forebrain as left and right. We commonly speak of them as left and right brains giving the very wrong impression that they are separate; that they work independently. Nothing could be further from the truth. That body of nerve fibers known medically as the corpus callosum aided by several minor callosa serve as passageways for information to pass from one hemisphere or brain to the other.

- ♪ **KEYNOTE 21:** The corpus callosum joins rather than separates the two halves of the forebrain labelled left and right brains. The major thinking processes of reasoning, problem solving, planning, making judgments, take place in these joined hemispheres.

- ♪ **KEYNOTE 22:** Though joined to work cooperatively, each of the hemispheres seems to have preferred ways of problem solving. As I tell you the preferences of each brain, think of your own preferences you so well recorded in Notebook I.

♪ **KEYNOTE 23:** The left hemisphere is a listener and a talker. It loves words, numbers and other symbol systems. It likes to put them together in a very orderly way. It likes to arrange the parts of a problem step by step before finding the solution. The student who prefers to use his left brain will turn in well organized papers. His notes from lectures will be outlined in the conventional format of I. A, B 1. a, b. All his ideas will be very logical and linear in presentation. To help you remember the way the left brain prefers to operate, place your left hand in front of you so that your thumb and forefinger form the letter L. That L stands for the preferred work of the Left brain, - Language, Logic, Linear. It is the brain that looks for the one right answer to a problem. Do you think most classrooms in our country would be places where thinkers who preferred left brain thinking would be happy, would get the gold stars? You are so right. For this is the conforming style of thinking that most schools appreciate, that most schools nurture and reward.

♪ **KEYNOTE 24:** The right brain in contrast to the left likes to look and to do. It is not a talker. It does not like to play with words. It far more likes to play with images, with picture ideas, with designs that it can make and see in it's mind's eye. It prefers to problem solve by examining the whole problem, - for example, such a visual learner looking at a broken motor would look at it, examine it and without talking about it, fix it.

By contrast, the left brained learner being presented with the same broken motor would ask, "When did it get broken? How many parts make up this motor? Do you have any directions for assembly? on and on before sorting out this information to reach a conclusion as to how to repair it".

The right-brained visual learner prefers to work from the whole (holistically) in contrast to his left-brained peer who talks his way through a problem putting the pieces together until he discovers the whole. Is one way better than another?

No! Just different approaches to problem solving. Are one way preferred in most schools and society at large? Yes. The orderly sequential arrangement that is explained in a logical linear way is.

 **KEYNOTE 25:** For hundreds of years creative, imaginative right-brained problem solvers, the Galileo's, the Edisons, the Einsteins have not been appreciated in conventional schools and society at large. Can you guess why? Write down your guess and then I'll tell you mine.

Galileo was such an original thinker (we call it divergent thinking) different from everybody else's way of seeing the known world of the 1600's. Therefore, people would not accept him and his way of thinking.

How about Edison? Well, he had trouble learning his letters in the first grade. After six weeks of trying, his teacher sent him home saying she had never had a pupil so dull. Fortunate for him and the world, his mother knew better and read him everything he wanted to know until he was able to master reading. And as for Einstein, well he too had difficulty in school because he was not good in language. After school daily, a bachelor uncle played chess with him valuing his visual problem solving ability. We're told Einstein had thought through his theory of relativity when he was 15 but that he was 35 before he could get it on paper so that others could appreciate his thinking. Any clues to your preferred brain for your learning? To help you, try the following right-left brain test (on the next page).

ARE YOU LEFT-BRAINED OR RIGHT-BRAINED?

You may circle a number one or both columns. Rating Code:

Not at all = 1

Sometimes = 3

Always = 5

Do you start each day by making a list setting priorities and sticking to them? Or do you like to jump in and plan as you go?

1 2 3 4 5

1 2 3 4 5

Do you stick to the same routine every morning?

1 2 3 4 5

Or do you alter your routine based on the way you feel and thus find yourself to be fairly unpredictable?

1 2 3 4 5

Do you prefer to finish one thing before starting another?

1 2 3 4 5

Or do you enjoy moving back and forth between projects?

1 2 3 4 5

Is it important to maintain routine systems of organization and does it bother you when others disregard your system?

1 2 3 4 5

Or do you frequently change your routines and find it boring always to do things in the same way?

1 2 3 4 5

Do you get irritated by changes in your schedule or when a friend pops over unannounced?

1 2 3 4 5

Or can you easily shift gears and enjoy the surprise?

1 2 3 4 5

Do you prefer several days notice before going out of town or having guests over for dinner?

1 2 3 4 5

Or are you always ready for spur-of-the-moment opportunities?

1 2 3 4 5

When asked to help on a project, do you check previous commitments saying "no" when you are too busy?

1 2 3 4 5

Do you enjoy following through with details on a project?

1 2 3 4 5

If you have a big project to complete, do you barricade yourself in a room with no distractions and work until it is completed?

1 2 3 4 5

At the end of the day do you clean up your work area at home or the office because you don't like to come back to clutter?

1 2 3 4 5

If you have an unpleasant task to do, do you plod through it?

1 2 3 4 5

Or do you say "yes" only to realize later that you are spread too thin?

1 2 3 4 5

Or would you rather come up with a new idea, promote it, and then let someone else handle the details?

1 2 3 4 5

Or do you spread everything out on the table or floor, turn on some music, make a snack and then start?

1 2 3 4 5

Or do you leave unfinished work out on the desk so you can pick up where you left off?

1 2 3 4 5

Or do you procrastinate until the last minute and then make a dull task exciting by racing through it to make your deadline?

1 2 3 4 5

To Score:

Add up the numbers circled in each column and compare the two sums. The left column describes typical traits of a left-brained person while the right column depicts right-brain traits. The column you scored higher in should generally indicate the extent of your preference.

Total Left Column _____

Total Right Column _____

A score of 40 or more on either side usually indicates a strong preference especially if the total of the other column is less than 20. If both scores fall within 15 points of each other, you have an integrated working style. This has many advantages according to McGee-Cooper. First, it allows you to be flexible rather than rigid as you go about your day. But also, whole-brain people get the best of both worlds by adding structure to their creative and spontaneous activities and by adding creative insights to logic-oriented problem-solving tasks.

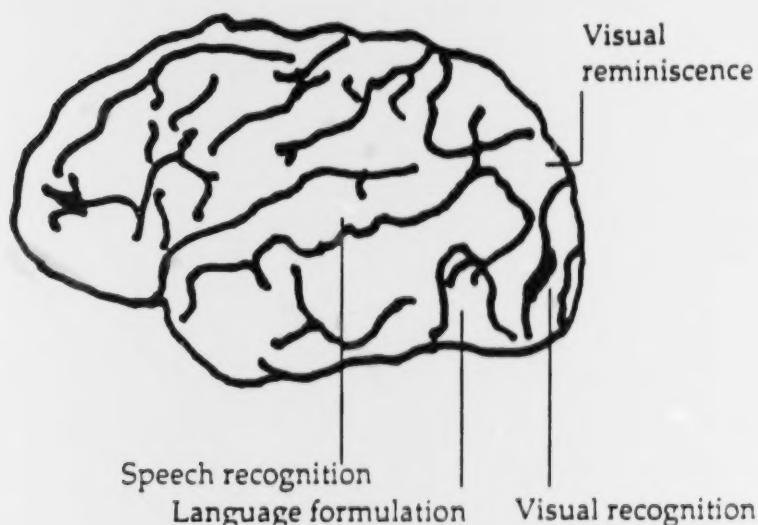
♪ **KEYNOTE 26:** Schools today are still failing those who can't deal with words, who can't put their ideas into words effectively. 14% of first graders in our country still are held back because of problems with letters and words. It is time for schools to explore, to appreciate and nurture the potential of those who prefer right brain thinking. For teacher suggestions see Webb, Gertrude M. *Left / Right Brains / Team-mates in Learning*, *Exceptional Children*, Volume 49, number 6, 1983.

♪ **KEYNOTE 27:** Whatever your preference, Left or Right Brain thinking, remember you have two halves of your forebrain. They were given to you to use cooperatively, to do the brain's work: THINKING.

After you have identified your preferred learning style, find more strategies to help your brain work effectively in Notebook VI, *Empowering My Learning*.

Read enough about that marvelous three pounds of gray matter you carry in your head? I hope not and that you are ready for more about your wonderful BRAIN. For those who'd like to read more about the Brain, here's a wee bit more. If you're not interested at the moment, go on to Notebook III, all about your Self.

- ♪ **KEYNOTE 28:** Each hemisphere of your Brain controls the motor activities of the opposite side of your body. In most of us who are right-handed (95%) the left hemisphere controls the movements of the right side of the body and vice versa.



- ♪ **KEYNOTE 29:** There are specific places for taking in information. Sensory information enters in specific locations. Visual information, things we see, goes to the back of the Brain, while the sounds we hear, auditory information, moves in deeper.

- ♪ **KEYNOTE 30:** Near the places where the information come in, are places where the sorting, remembering, comparing and contrasting of information occurs. Moving away from the areas where information comes in are the more intersensory and integrative areas, where what has been seen is teamed with what has been heard. It is here that the information is analyzed, evaluated, synthesized and prepared for the output in speech, action and feeling as seen on the Informational Processing Model on the next page.

INFORMATIONAL PROCESSING SYSTEM

INPUT (Receptive)	BRAIN (Integrative)	OUTPUT (Expressive)
Stimuli (S)		Response (R)
	<u>Generalization</u> Time, space, universal truths	
AUDITORY	<u>Conceptualization</u> Critical, conforming, evaluative	LANGUAGE Writing, Reading, Speaking, Listening
VISUAL	<u>Association</u> Comparing Contrasting Categorizing, classifying Analyzing, synthesizing	Native, Foreign, Art, Music, Math, Other
TACTILE - KINESTHETIC	<u>Memory</u> Short-term Long-term Discrimination Differences Likenesses <u>ENVIRONMENT</u>	ACTION EMOTION

• **KEYNOTE 31:** The Informational Processing Model as you can see, is computer-like in design with major categories of Input, Integration and Output. The Input category is fairly easy to follow if you think of yourself in the center of a large circle symbolizing your world which is packed with information which your eyes, ears, noses, mouth and muscles are equipped to see, hear, smell, taste and feel as you did in Notebook I when you were building your understanding of how you learn.

Maybe so, but there is just too much information in the world around us for our sensory systems to take in at one time. Therefore we become selective. We take in only what is interesting to us. That's when we become active taking in what we want to learn and shutting out what we don't want to learn.

The ability we have to select information we'll let into our brains is a very important one. It protects us from overload. Without it we would constantly be overwhelmed by the sounds, sights, smells and feelings that surround us. That's the job of the hind-brain we talked about before.

Right now, it is important for you to know that you are the actor in this learning game; that you select from this buzzing, booming world around us what you will attend to and what you will screen out and pay no attention to.

Sometimes this screener-outer, as it screens out information, can do us dirty; for it may shut out our teachers' words before we have fairly listened to them. Having heard one word, it may decide that the rest is going to be boring. It goes into action shutting out the remainder of the teacher's talk. It sends our minds wandering, perhaps directing our thoughts to last night's party or tonight's anticipated date. At the close of this class, you know nothing about the subject discussed by the teacher. Do you catch this secret? If you do, please fill in the missing word in Keynote 32.

 **KEYNOTE 32:** To learn anything you must pay _____ to the subject. If, after thinking about the missing word, you still can't find it, re-read this paragraph looking for the main idea and try once again to supply the missing word.

By this time you must know which way you prefer to attend. Do you like to listen to others talk for long periods of time? Would you prefer to converse with the talker about his ideas so that you can make sure you understand what he is talking about?

Or would you prefer the talker show you a picture or draw something on the blackboard to help you understand the idea he is building? Building an idea is a pretty involved process, as you can see, for we are still at the very beginning state of getting information in. It's important for you at this point of concept building to be aware of how you prefer to get your information; through listening, looking, touching and to use that knowledge for beginning to learn new ideas.

 **KEYNOTE 33:** I've made an additional, separate model of that part of the Informational Processing System dealing with developing ideas, Integrative processing. I've called that portion, the Cognitive Ladder, see page II - 7 because cognitive means how we know and ladder shows the steps we go up to know, or to really understand.

The Cognitive Ladder is a model that speaks to movement from lower to higher order thinking. It suggests steps on the ladder that one usually climbs hypothesizing as he moves from concrete to abstract thinking. The steps are five in number. They are discrimination, memory, association, conceptualization and generalization.

At each step, one's brain is operating on information it has been offered and it has selected to process for use as it actively learns. Some of the operations are unique to the step at

which the learner is. Some are repetitive such as sorting differences and likenesses. All are interwoven and cyclic in effect as the learner proceeds to clarify his/her developing concepts.

♪ **KEYNOTE 34:** At the lowest step, discrimination, learners attends with one, two or more of his sensory systems. Learners listen, look, touch, taste, smell or feel something in their environment. Learners immediately begin to hypothesize, matching the shape, size, color, dimensions of the objects, to the many, many bits of information earlier stored. As learners search for differences between the newly perceived object and the known ones, they climb onto the next step - memory.

♪ **KEYNOTE 35:** At the memory step, learners work to retrieve known objects with unlike and comparable features. In general, things most recently stored are easiest to retrieve. Those stored long ago, may take more time. More significant than the temporal relationship of the object stored is the quality of the memory stored.

How deep the memory trace has been made depends on the understanding built around the concepts related to the object being remembered. For example, a beginning reader who initially learns the shape of "A" recognizes it as a triangle with a horizontal line across its midriff. Should one move the "A" in space, on its side, upside down, the beginning learner may not recognize the "A". Those who really understand "A" conceptually as a symbol for many sounds in varying locations within words, as the leading letter alphabetically preceding the "B", as a letter with which they may "play" moving it around in space, will not be thrown by an upside down or sideways "A". Their memory traces are deep enough to give them the foundational knowledge to secure their remembering, to insure their recognition of the concept presented no matter how it has been rearranged in space.

- ♪ **KEYNOTE 36:** As learners remember, compare, contrast shapes, sizes, dimensions and/or relationships, they begin to hypothesize the family, class or category in which the object belongs. While hypothesizing, learners move a step up the Cognitive Ladder as they make these associations.
- ♪ **KEYNOTE 37:** Continuing to the conceptual level, learners take ideas apart (analysis), put their parts together (synthesis), play with the ideas hypothesizing yet again in a "what if" vein as they take charge of the idea, manipulating them in time and space and making them theirs. At this point, learners say, "Eureka, I understand! This is mine to do with (application) as I choose. I may tell someone my idea. I may write it. Alternatively, I may now more critically listen or read experts in the field and challenge their thinking. I feel good about my new learning. I'm going to use it in my current learning setting, be that in the world of academics, business or in social interaction with peers and others. In fact, I would like to teach this idea to others. I don't want to keep it to myself. I must look for ways and times to spread my idea so that I, in turn, may be challenged to yet higher levels of thinking."
- ♪ **KEYNOTE 38:** Learners are now ready to review their new concept, testing its usefulness in other, though similar, situations, hypothesizing its use in imaginary spaces and locations. The new concept is theirs for good, not for the "Friday test" to be forgotten Monday thus needing to be relearned for the next exam. Such learners now own the concept. No one can take it away from them.
- ♪ **KEYNOTE 39:** Let's test the concept of the cognitive ladder using the development of the concept of war. Two five year olds, Jimmy and Andy, get into an argument over the ownership of a red ball found by one of them on the playground. Jimmy, picking up the ball, says, "Look what I found, a rosy red ball. It's mine. I found it. Findsies, keepsies." Andy responds, "Oh, no you don't. That ball is mine. I brought it from home this morning. Give it to me, it's mine." At this ba-

sic level of discrimination, the boys have discriminated the ball, its color, its ownership.

As they move up the cognitive ladder, Jimmy remembers a rhyme that gives him his claim to ownership while Andy remembers where he last saw the ball and how it got to school. They begin to hypothesize that the red ball may have gotten to the playground with Jimmy proclaiming, "Andy, it could not be your ball because you did not leave it in the playground. You said you brought it into school." To which Andy responds, "How do you know that after I brought it to school and hung my jacket with the ball in my pocket in our classroom, that Tommy or Mary or someone else did not take the ball out of my pocket and throw it out onto the playground? Prove that didn't happen."

Jimmy and Andy continue to compare and contrast earlier experiences which they remember to support their individual claims to the red ball. At that point, the teacher, Miss Smith, enters the scene and asks, "What's all the excitement about?" Each of the boys hurriedly projects his case - his reasons for his ownership of the ball. The teacher then asks each to review his assumptions as she lists them on the board, e.g.:

Jimmy's reasons

1. I found it.
2. Findsies, keepsies
3. He can't prove it's his.

Andy's reasons

1. I brought it to school.
2. It's my shape, size, color.
3. Someone must have taken it from my jacket pocket.

By so structuring Jimmy's and Andy's reasons, Miss Smith has laid the foundation for their categorization so that they may compare the similarities and differences in their reasons. Thus Andy, analyzing each set of reasons says, "Jimmy, your finding the ball doesn't prove that I didn't bring it from home and I did." Even if you did bring it from home, what about

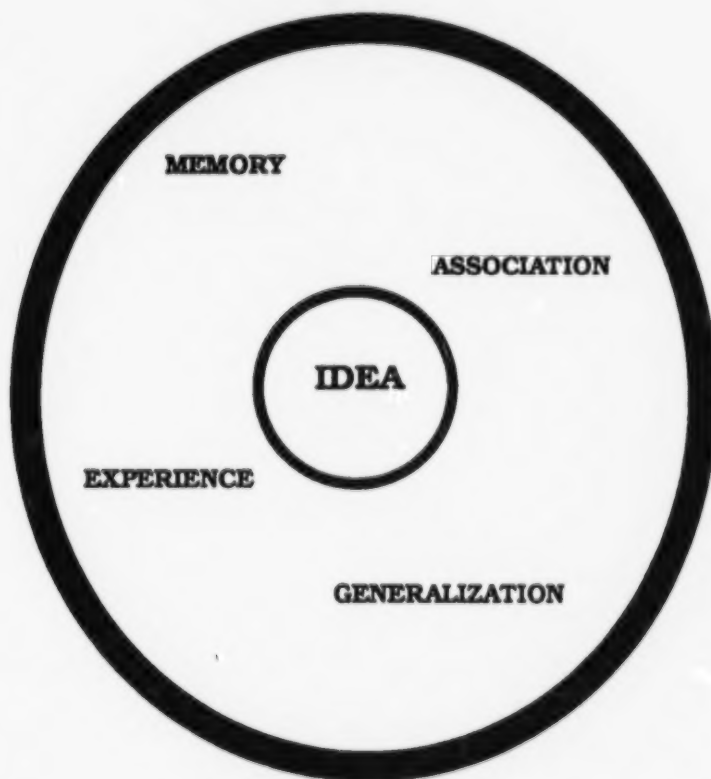
findsies, keepsies? I learned that rule a long time ago and it works. I'm sticking with that. Too bad about you if you don't like it." At this point, Miss Smith suggests to the boys that if they continue to fight over the ball in question's ownership, they have the beginnings of a war. To broaden their understanding, Miss Smith adds, "Grown-ups often fight over things one or the other believes he owns, even as you and Jimmy are doing. Thus, they often go to war over places and property which somehow they can not share." Miss Smith is potentially leading the boys to alternative solutions of peaceful compromise. The boys reject Miss Smith's suggestion. Andy says, "It's my ball. Give it to me, Jimmy." To which Jimmy responds, "No, sir, I found it. It's mine, findsies, keepsies." Miss Smith points out that each one's insistence of his own ownership is the very way that war begins, that if that pathway is their choice, they had better prepare for a bloody battle. She suggests once again the alternative pathway to a peaceful solution.

♪ **KEYNOTE 40:** The boys have moved independently from discrimination to conceptualization of the concept of war. They are ready to apply the concept of war in their own world of play, to learn its usefulness or lack of same and eventually to be led to alternative decision making of peaceful compromise.

Would you like to know ways to improve your movement up the cognitive ladder? See strategies for movement up the cognitive ladder in Notebook VI, Empowering My Learning, Keynotes 37 - 37 & 45.

♪ **KEYNOTE 41:** Whatever our strengths and our areas needing strengthening through the informational processing system, we are constantly seeking to make sense out of our world. We do this through "thinking" which is the product of our experiences and undergirds the skills of listening, reading, speaking, and writing. (See Notebook I, Keynote 15.)

- ♪ **KEYNOTE 42:** Thinking is the foundation of our productivity. It is where our ideas are formed. It is the source of our creativity. Respect your thinking ability. Strengthen it. Cause others to respect it through your expression of it. It is the product of your primary tool, your Brain, your organizer of information.
- ♪ **KEYNOTE 43:** Scientists, medical personnel especially neurologists, as well as psychologist are ever studying and discovering newer linkages within the brain. Recent research projects add one more chaotic model than the informational processing one described in linear fashion up to this point. The new model, seemingly more characteristic of predominately right brain learners, is circular in form with ideas developing simultaneously at any time and manner to result in an "Aha! I've got it" concept coming, and often surprising one's world, as the accompanying model illustrates:



NOTEBOOK III

Myself

• **KEYNOTE 1:** The piece of equipment that we all have to help or hinder us in our learning is called the Self. As with the brain, each of us is born with a core of self. About the time you were born, a researcher named Thomas took his fellow workers into hospital nurseries to assess newborn infants' ways of looking at their worlds. The researchers experimented by flashing on lights and making loud noises, thus stimulating the babies in the nurseries. They noted that some of the babies liked the sounds of things they saw, even looking for more, while others pulled away from the same stimuli. The researchers followed the infants for two years doing similar experiments every few months. They noticed that the pattern of self-activity remained the same in each infant; those who enjoyed the stimulation seemed more outgoing, open and interested in the world around them, while those who were frightened by the stimuli seemed generally more closed and withdrawn. Thomas concluded that each of us has an inborn core of self.

• **KEYNOTE 2:** Which brings us to the question, "What is this thing called Self?" Victor Raimy, a famed psychologist, said in 1943 that the Self is "what a person believes about himself." Another well-known student of Self, Arthur Jersild, adds, "It is his view of what he has been, is and might become." How would you define it? Complete this sentence: The Self is ——— Some PAL students put it this way, "Self is what gets you to

be either a winner or a loser in this world. Whatever the definition, I think we would all agree that.

KEYNOTE 3: Doubt of self can result in failure for the learner's energy is absorbed when he worries and doubts his ability.

A person who doubts himself
Is like a man
Who would enlist in the ranks of his enemies
And bear arms against himself
He makes his failure certain by himself
Being the first person to be convinced of it.

(Alexander Dumas)

KEYNOTE 4: Self is the energizer of learning; that for learners to go on they must bring to the task a feeling that they can. Walter B. Wintle said it well in his poem, "The Man Who Thinks He Can."

THE MAN WHO THINKS HE CAN

If you think you are beaten, you are;
If you think you dare not, you don't;
If you'd like to win, but think you can't,
It's almost a cinch you won't.
If you think you'll lose, you're lost,
For out in the world we find
Success begins with a fellow's will,
It's all in the state of mind.

If you think you're outclassed, you are;
You've got to think high to rise.
You've got to be sure of yourself before

You can ever win a prize.
Life's battles don't always go
To the stronger or faster man;
But soon or late the man who wins
Is the man who thinks he can.

We may read of a much earlier concern with Self in the Hindu scriptures:

"Oh, let the self exalt itself,
Not sink itself below;
Self is the only friend of self,
And self self's only foe."

♪ **KEYNOTE 5:** The self is an active participant in learning. The self is not a sieve through which a sense of self-worth is poured. Rather, it is an active player, exercising judgment and selecting those impressions it wishes to incorporate within itself. It actively chooses the tasks each of us will do.

♪ **KEYNOTE 6:** The self is nurtured by the significant people in our lives. Though each of us is born with a core of self, it develops as we are nurtured by the important people in our lives; people who fulfill or do not fulfill our basic needs. Dinkmeyer's list of basic needs includes:

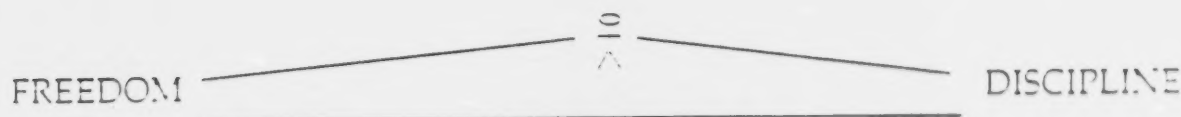
- The need for security - to be safe and relatively free from threat;
- The need to be loved and accepted unconditionally;
- The need to belong, to be part of a group;
- The need to be recognized, to gain approval, to feel significant and accepted for the way in which one functions;
- The need to be independent, to take responsibility and to make choices.

You will complete a measure of the people who helped or hindered the development of your sense of self-worth. You may do it now if you choose or wait until you do the total assess-

ment of your self, keynote 24. As your basic needs are fulfilled your sense of self-worth emerges, even as a tree grows sending out branches, leaves, enriching its world. When basic needs are not met, like the tree, the self does not emerge strong and giving. By contrast it becomes weak and unhappy in its world.



- ♪ **KEYNOTE 7:** The self is a reflection of early parental nurturance. First significant others are generally our parents primarily because they are there first. They are the earliest ones to approve or disapprove our initial learning behaviors, be that learning to eat, to sit, to stand, to follow directions, and to understand our unique world. In the words of Harry Stack Sullivan, noted psychiatrist of the 50's, we learn from parental interaction that we are either good people in a good world or bad people in a bad world by the time we are six weeks old.



- ♪ **KEYNOTE 8:** As the child grows, he needs an increasing amount of freedom. The amount of freedom to explore in the home, balanced by limits established during this socialization process, affects the emerging self in its ability to understand and control itself. William James describes this world into which a child is born as a "buzzin, boomin, place" - terribly confusing and frightening, unless boundaries are established within it. We believe that the ideal home sits at the midpoint of an axis between freedom and discipline.

- ♪ **KEYNOTE 9:** Developing sensory motor skills (running, hopping, skipping, throwing and catching a ball); forming ideas and translating them into language for effective communication; building successful social relationships are the major foundational tasks of the remaining pre-school years. Feedback from additional significant others (siblings, grandparents, neighbors, age-mates) results and reacts to the level of success achieved in these primary tasks. Whenever such people told you you did something well, your chest swelled with pride; you felt good about yourself and were ready (energized)

to take on a harder task. By contrast, when you could not make them understand what you were trying to say, or when you repeatedly could not catch the ball thrown to you, you began to feel less worthwhile, inadequate. Remember?

♪ **KEYNOTE 10:** Parents need to know how to structure settings for success so that positive self images emerge. At the end of this notebook is a letter to your parent to help him/her do just that. Read it and give it to your Mom and/or Dad when you think the time is ripe).

♪ **KEYNOTE 11:** The self continues to emerge reacting to teacher nurturance. What one brings to school on the first day is obviously the result of the many interacting forces in one's environment that influence one's personality. The child bears a package of anticipations and expectations for himself gathered over the five or six years that precede the first day of school. Most children bring with them a desire to continue learning and growing.

A few, such as the battered child, may come to school not knowing how to love or to learn, already soured on the entire process. It is important for teachers to understand the pre-school development of the child's self so that they can assess the psychic energy, the readiness children bring to the tasks in their new environment.

At this crucial period of school entrance, the teacher becomes the most significant teacher in the child's school life. Like the parent during the first few weeks of life, the teacher now has the opportunity to establish basic trust or mistrust, a sense of being a good me in a good academic world or a bad me in a bad academic world (learning place). Children come to their teacher with the same basic needs they have always had - of feeling wanted, a member of the group, respected for their thinking, words and actions. The teacher has a chance to meet those needs by assuring each child of his unique capabilities. Remember your kindergarten experience. Did you



feel that way? Did your teacher feel about you as Pablo Casals did when he noted that each child is a marvel?

♪ **KEYNOTE 12:** The effective teacher, like the parent, uses encouragement as a tool, balancing freedom and discipline, leading children from dependence to independence as they learn the expected academic tasks. Children develop a sense of worthiness in the society in which they find themselves. All goes well and Johnny moves on feeling good about himself and the world. In short, he develops a healthy self-concept that gives him the courage to function; makes him more open to the school experience, free to choose, free to trust himself and free to accept others without negative anticipation.

♪ **KEYNOTE 13:** What of the other children who come to school like the first group, wanting to learn? What happens to them when instead of success they meet failure in the very first year of school, failure to learn to read, to discriminate letters and sounds? What happens to their sense of adequacy when their peers move along to the next grade and leave them behind? What does a discouraged self feel like when school says to him every day: "You can't do it."

Some years ago, it was my pleasure to work with some 75 such children, 11 of their teachers, and many of their parents over a five-week period in the Curry-Attleboro Learning Project in Massachusetts.

The first few days of our meeting, in response to questions about themselves, children typically gave such answers as:

"People call me dumb The other kids get it right

I never get a star I didn't understand She sends

me to the principal's office She screams at me.

She won't help me when I can't get it right Am I

really retarded? I asked my mother, "Don't you really wish you had someone else for a child?"

♪ **KEYNOTE 14:** Children with consistent school failures have very low opinions of themselves. They are acutely aware of their failures; that they can't do things other children can do. They feel insecure, inadequate, rejected and terribly dependent. Recognizing that none of their basic needs were being met, we questioned whether they could bring any psychic energy to the academic tasks before them. Since the 75 children were all first grade failures, we asked their teachers to review their first grade experiences and this is what we were told. These children who currently seem unmotivated and immature had come to the first grade eager to learn to read. From a child's view, learning to read opens the door to the magical world of his big brother or sister, to the wealth of information to which they are privy. For 86% of our first graders, when teachers flashed cards on which letters are printed, the children match appropriate sounds to those letters, a process formally called decoding, and then put those pieces of the puzzle into words, phrases and sentences. These children have the needed keys to reading. We say they can read. We applaud their accomplishments. They feel good about themselves and move towards greater competence and independence.

♪ **KEYNOTE 15:** When the opposite situation occurs, and it does in approximately 14% of our first graders, they are not able to match sounds to the pictures of the letters. They fail in decoding, the gateway to reading. When this occurs, many teachers decide to repeat the teaching of decoding skills in the same way the children have failed to learn them earlier. They subscribe to the old teaching cliché, "Let's do it over and over until we get it right." Remember?

♪ **KEYNOTE 16:** Some teachers of such students recognize that the original way of teaching the code may be antithetical

to the children's way of learning. The phonetic approach to decoding, the most usual method, is the most difficult way for children whose language development has lagged behind their other areas of development, e.g. their thinking, their cognitive development. Such creative teachers have sought out and tried visual approaches to reading rather than phonetic ones.

♪ **KEYNOTE 17:** When visual approaches have not been sufficient to break the code they have introduced multi-sensory, visual, tactile-kinetic approaches in addition to phonetic ones. Some children, teachers have discovered, are more successful with a meaning approach, e.g. rebuses.

♪ **KEYNOTE 18:** Whatever the approach used in the teaching of decoding, teachers must be sensitive to the involvement of the learner's self concept in the process of the learning. Particular supports need to be built to protect the emerging self-concepts of the children who do not learn to decode with the first method tried. Certainly those who do not make it with the second method tried are likely candidates for depressed self-concepts. What happens to those who have difficulty with our third or fourth trial and error methods? What of their self-concepts? What happens to their sense of self worth, the energizer of all learning?

♪ **KEYNOTE 19:** The historical record told to us by the teachers of the failing first graders revealed the reasons for their concepts of self as "dumb, retarded, less adequate than the other kids," losing the hope for success in learning to read, thus de-energized in the learning process. Perhaps it was at this tender age that you began to feel school was not a good learning place - a place you had to go to - a place in which you could not be a winner. If you were one of these first grade repeaters, you probably began to doubt your school-related abilities.

♪ **KEYNOTE 20:** Perhaps for you it was not first grade reading that shattered your self concept. Perhaps it was a little later on when you were expected to get the letters of the alphabet well formed between the lines or when you were asked to learn the multiplication tables. Perhaps all went well until you were expected to spell 10 two syllable words correctly each week or learn and apply grammatical rules.

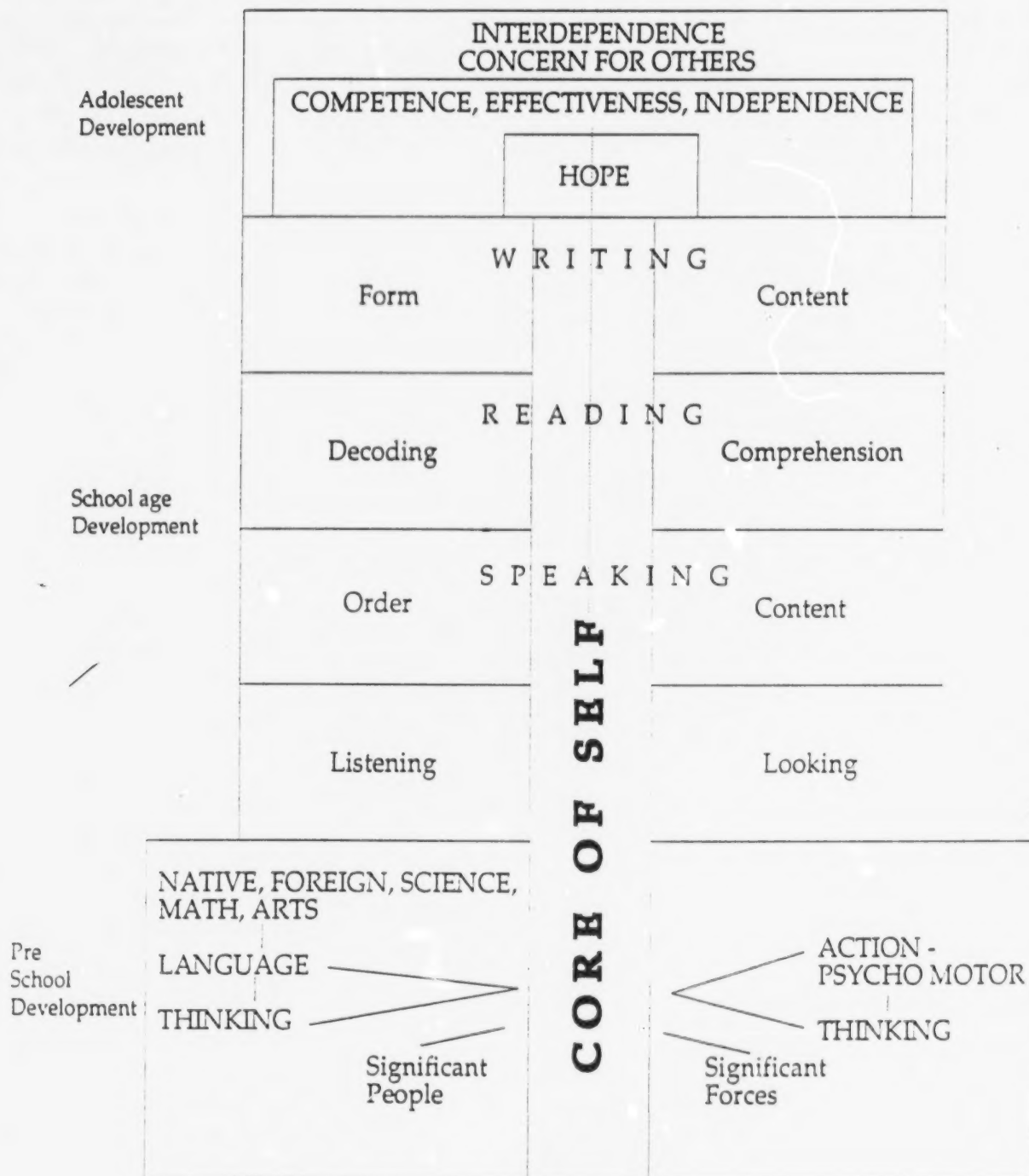
♪ **KEYNOTE 21:** Similar, but more intense, have been the feelings expressed by students who sat obediently grade after grade, who have been promoted socially, but who have not accomplished the expected school competencies. David expressed his frustration this way: "I always thought I was stupid. Socially, I didn't have any friends because I felt inadequate to them. My teachers always said that I could do better but I just didn't try hard enough. But I did try."

♪ **KEYNOTE 22:** For each of you the skill you were asked to perfect may have been different. Note on this page for future reference the task and grade level that began to weaken your sense of adequacy as a school learner:

We will be back to this issue as we assess our current sense of self-worth. Since the self energized the learning process, it is important for you to know the quality of your self-concept, your sense of self-worth.

♪ **KEYNOTE 23:** The model that follows gives you a visual opportunity to follow the emergence of your self concept. It shows one's core of self striving from the very beginning to become competent, effective and independent. Even before you were born you began to swim to find your way. After birth you worked hard in the preschool years aided by family members to find out about the world around you. How well you caught on, how well you could talk about your ideas, made them approve of you or if you could not do that well, tell you "I can't understand you. Go play in the traffic!" Positive acceptance made your self concept feel stronger and made you work harder to do well in the things they wanted you to do. Negative reactions made you feel less adequate. In your school age development reactions to your acquiring the school competencies made you feel more or less adequate. The degree of success you had has made you feel worthy or not. Walk your way up this set of blocks to see where your sense of self has been strengthened or insulted. Mark the model accordingly with an S for strengthen and I for Insult. What effect did your success or lack of same have on the energy you applied to more difficult tasks?

Hierarchical Model of Active Learning



♪ **KEYNOTE 24:** Think of the significant people in your life who have strengthened or insulted your sense of self worth as you tried to learn the physical, social and academic competencies of your world. In each block assigned to that special period of your life insert the names of those family members, teachers, friends who so influenced your emerging self. Put an S after the names that made you feel good about yourself and an I after the names of those who lowered your feeling of self worth. Add the S's and I's. Which is greater in number? Is the greater number of S's inside or outside of school? Draw your own conclusion. The list of S's should indicate where your self feels most adequate, the list of I's where your self feels most inadequate.

INFORMAL SELF CONCEPT MEASURE

Junior High

Senior High

Pre-School

Elementary

Number of S: _____

Number of I: _____

In School: _____

Out of School: _____

WHO AM I?

 **KEYNOTE 25:** I am . . .

Directions: **Write five sentences starting with "I am" . . . to describe yourself.**

1. I am

2. I am

3. I am

4. I am

5. I am

♪ **KEYNOTE 26: Self-Portrait**

**Directions: Draw a picture of yourself in the space below.
If you may wish draw yourself doing a favorite activity.**

KEYNOTE 27: What Makes Me Special?

• **Directions:** What do you think makes you different and special from other people? Write your answer below. If you think your difference is positive check +, if negative check -

[illegible]

 **KEYNOTE 28:** I Wish I Were I'm Glad I'm Not
Directions: **What qualities do you wish you had? What are you glad you don't have.** (Example: I wish I had more sisters. I'm glad I'm not an only child.) Complete each of the sentences below following this pattern.

1. I wish I _____

I'm glad I'm not _____

2. I wish I _____

I'm glad I'm not _____

3. I wish I _____

I'm glad I'm not _____

4. I wish I _____

I'm glad I'm not _____

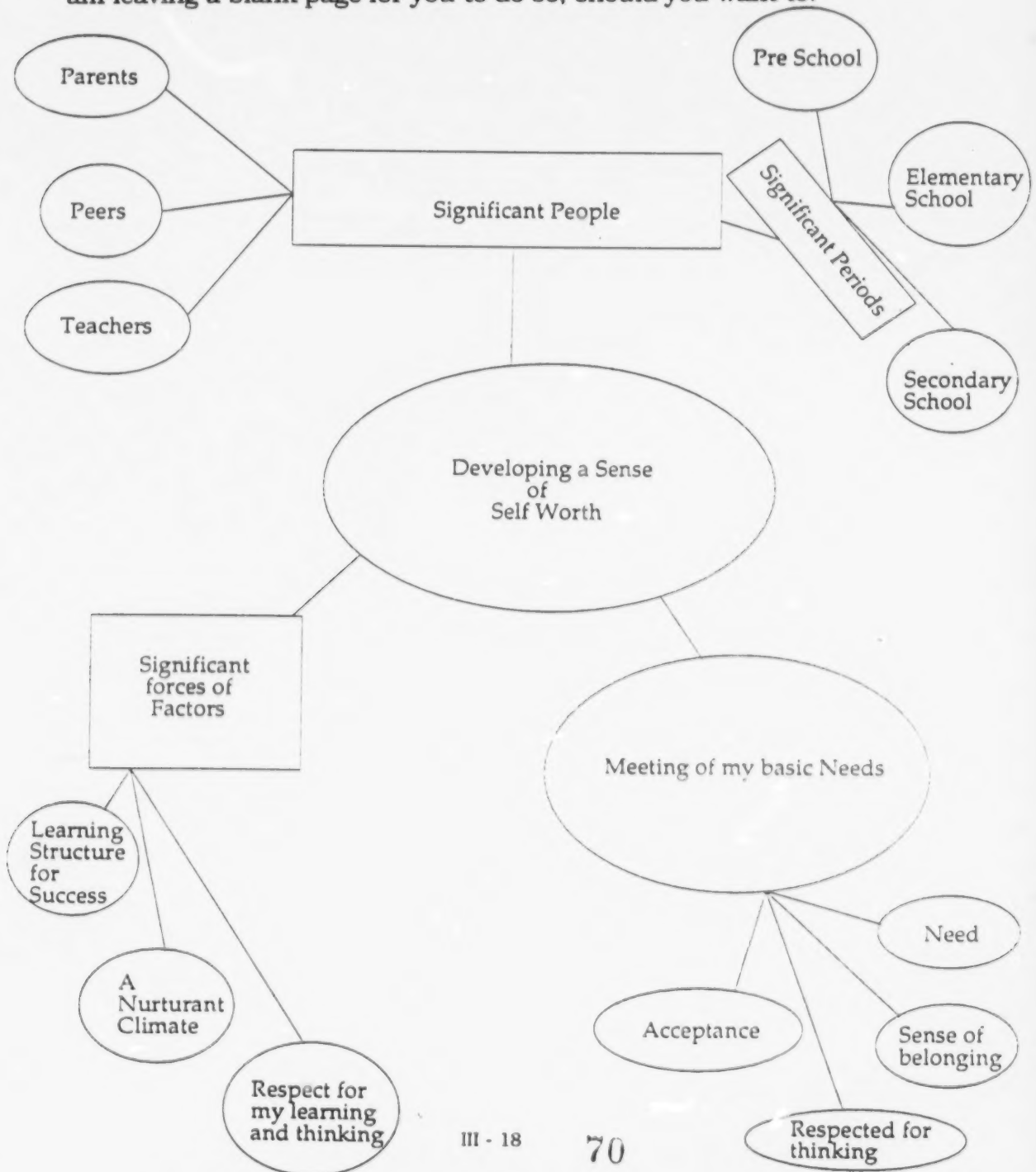
5. I wish I _____

I'm glad I'm not _____

 **KEYNOTE 29:** Rate your self concept in relation to school learning. Do you feel you can learn effectively in school? If so, rate your self concept as S for Strong. Do you feel inadequate for certain kinds of school learning or all school learning? If so, rate your self concept as I for inadequate. We will suggest strategies appropriate to improving your self-conception in Notebook VI, Keynotes 1 and 2.

Self concept in relation to school learning __ S __ I __ .

🎵 **KEYNOTE 30:** To help you think about the development of your self concept, examine the web below. Perhaps you'd like to draw a web of your own self concept's development looking back to what you've already noted as strengths or insults. I am leaving a blank page for you to do so, should you want to.



Dear Parent,

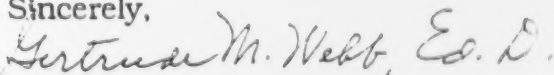
In this book we have shared with your son or daughter some strategies to help him move to active learning. Using this manual, he has learned his learning strengths, his interests, and the areas and ways he needs to strengthen to become a competent school learner. However - we recognize that you were your child's first teacher. You guided him as he tried to learn the rules we live by, the words we use, the ideas that make us grow into productive citizens. He has now reached secondary school supported by your nurturance of him. Your acceptance of him as he is (not as you dreamed he might be) has helped him when things got rough. Mostly he made it because you expressed your faith in him. You knew he would make it.

Keep telling him that you are sure he will make it in the long run; that you are there to help when needed; that now that he is an adolescent, that you'll step aside for you know he wants to enjoy his independence. You'll let him make mistakes and try again even as you have done. Assure him that life and learning are a continuous process and that correcting errors is part of that process. Above all keep your sense of humor so that you can put difficulties in perspective as part of the road to success.

Be patient, learning is a long process. You are your child's source and strength. Keep pointing out his strengths. Set up tasks where he can demonstrate those strengths to the family. He needs to see himself helpful and resourceful. He needs to feel ready to "fly" on his own.

As a parent, remember, you are a creator, an artist who has created a marvel. Stand by; encourage it to happen. Enjoy.

Sincerely,



Gertrude M. Webb, Ed.D.

P.S. If your child is a daughter, please substitute the word she for he and her for him. I have used the generic masculine to include both sexes because she/he and her/him make for halting reading. Please forgive.

NOTEBOOK IV

The Tools Which Help Me Learn

In Notebook II we talked about carpenters daily knowing how sharp their tools were when they took them to their jobs. We compared ourselves as learners going to our very important job of Learning having two inborn tools that we always bring with us. I'm sure you remember what they are. Please put them in the circled spaces where you think they belong on the web below.

LEARNING



Clues: BRAIN for circle 1.



SELF for circle 2

Now please web to your circles that enclose those two powerful tools what you now know about how yours work e.g.

BRAIN

Prefers:

Right brain activities

Visual problem-solving

Designing, drawing,
doodling

SELF

Feel good when:

I finish a project

I am challenged

I get encouragement

I get praised

I see hope of success

Knowing, understanding how your primary tools, your Brain and your Self, (Metacognition) work is critical and foundational to your success in Learning. Yet they are not the only tools available to you. Remember Robert Louis Stevenson's bit of wisdom, "The world is so full of a number of things". Then look around your environment and note not only what but also who might provide you with information to enrich your learning.

Your very first teacher was probably one or both of your parents. For those who are lucky, for whom neither death nor divorce has caused difficulties, parents still are there whenever you need them. They remain a continuing source of encouragement and support. They truly care about you and your accomplishments. They have a wealth of experience to share with you. So reach out, ask for their views. Listen to their advice. Weigh it in relation to the problems you are trying to solve. Then make your own decisions.

Do you have older siblings, brothers, sisters? How creative are they? What new views can they offer you as you try to make wise decisions?

What other family members are available as resources for you? Grandparents? A favorite uncle or aunt? A cousin with whom you shared many growing-up special occasions?

There is an old truism (aphorism) that "blood is thicker than water". Avail yourself of the experiences, interests, and personal contacts family members have had. Match them to your interests and needs. Family members generally are happy to share with you. Give them the chance. They may lead you to explore new, unknown and exciting paths.

While family may constitute a major informational resource for you, so should your teachers be. A teacher's prime task is to help you understand the why, the what, the how, and the what if of the information s/he is trying to teach you. A

teacher's greatest joy occurs when s/he sees the "electric light" of understanding go on when you say, "I got it. Now I understand."

Seek your teachers out whenever the idea being presented is not clear. At such times in class when you ask a question, chances are you are asking for many other students who have not fully understood the idea. If you prefer to ask after class because of fear of embarrassment, arrive at your teacher's assigned office hours or call for a special appointment. Good teachers delight in students who want to learn and will welcome you. As for the few who don't, look for other teachers or to your peers for clarification of ideas.

For surely peers, all of whom are trying to understand new bodies of information, are a great resource for such learning. Though some students prefer to study alone, learning with peers collaboratively may be considered another "people" tool for helping you and them learn. The word collaborative begins with three letters, "col". "Col", a prefix, comes from the Latin "com" meaning "with". "Com" is changed to "col" for sound effect. (Try saying comlaborative). "Col" retains its meaning of "with". "Col" is followed by a word we all know, - find it? "labor" which means _____. So far we now have "collabor" which means "working together." "Collabor" is completed by an ending, a suffix "ative" which merely changes the meaning to describe those in the mood for working together. (Words can be fun when you figure out how they developed. **Try it! You'll love it.**)

If all members of your collaborative group are effectively to participate in the learning, what do you and each of your peers have to bring to your meeting sessions

_____, _____, and _____? Don't know how you filled in the blanks. I put in desire to learn the subject, willingness to work (labor) and to share with his peers (coll). Having cleared that with each peer in our first meeting, we would talk about the task,

the subject to be learned, the strategies we might use in each session, e.g., planning 10 minutes at the beginning of each session for review, bringing in questions, webs, summaries or precis of the material to be studied during the current session, and allowing 10 minutes at the close for highlighting important issues. We would agree that there is no such thing as a "dumb" question; that rather questions that may seem "dumb" merely say that something more needs to be clarified; that we need to discuss the issue more; that we need to listen to each other until real understanding is built and that such understanding is the real purpose of our collaboration. We would agree further that we are not studying together merely to pass a Friday's test and then having to re-learn the factual information again the next time we find it in an upcoming test. Rather, we are studying together for long term learning, for understanding, for "knowing".

Though Notebook III gave you many strategies to empower your learning, some of you may be ready for more, especially in preparation for tests. The following such suggestive tools to help you prepare for essay tests were submitted by Diane Goss and Susan Pratt, Professors at Curry College and Instructors in The Program for Advancement in Learning. Enjoy!

TEST-TAKING ESSAY EXAMINATIONS

1. **ANALYZE** the question carefully.
 - a. Be sure you understand what the question is asking.
 - b. Be sure you understand what is required of you.
 - (1) How many parts are there to the question?
 - (2) Are you required to answer all of them?
- c. Notice key words of instruction:

compare - note similarities between things
contrast - note differences between things
criticize - state your opinion and stress weakness
define - state the meaning and be complete
describe - state characteristics
diagram - make a drawing showing relationships
discuss - define the issue and elaborate
explain - show cause and effect, give reasons,
describe process, tell how, etc.
illustrate - provide examples
interpret - explain the meaning of something
justify - give proof or reasons to support opinion
list - record series of numbered items
outline - sketch out main points with significant supporting details
prove - use facts as evidence
relate - connect items; show influence
summarize - tell main points
trace - move sequentially from one event to the next

2. **BRAINSTORM** - To get relevant ideas out. Mapping these ideas helps to show their relationship.

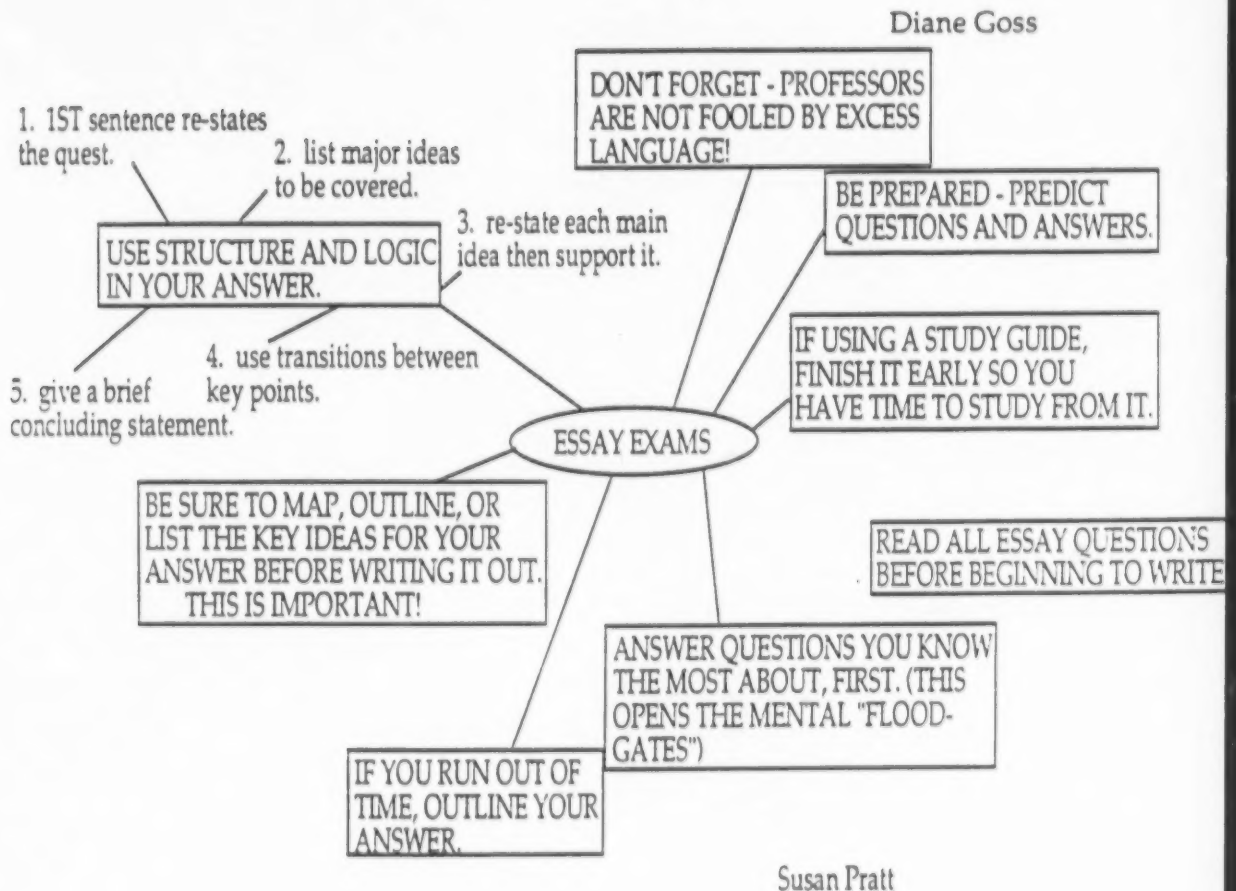
3. **ASSOCIATE** - Let one idea lead you to another.

4. **ORGANIZE** - Decide the order in which you want to present your ideas and number them.

5. **WRITE**

- a. Write an introductory sentence expressing your main idea.
- b. Develop your idea following the sequence you established when organizing.

6. **RE-READ** - Re-read the question as well as your response. Be sure you answered the question clearly and included all relevant information.
7. **PROOFREAD** - for spelling and grammar
8. **PRACTICE** - Predict possible essay ahead of time



Lest you are feeling overloaded, remember that there are only 24 hours each day and that some of those hours are needed for maintenance activities, sleeping, eating, and socializing for "All work and no play makes Johnny and Mary dull people."

But when you do get to your work time many students complain, "I can't organize my time." Try each of the following organizers. See which works best for you. Use it or improve it by changing it to best meet your needs. Better still, design your own. If you do, be sure to share it. Two of the following models were designed by sons of mine, Marc E. and Samuel L. Webb who are happy to share them with you.

GET IT DONE TODAY

DATE: _____

COMPLETED: _____

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____
12. _____
13. _____
14. _____

Date: _____

Day: _____

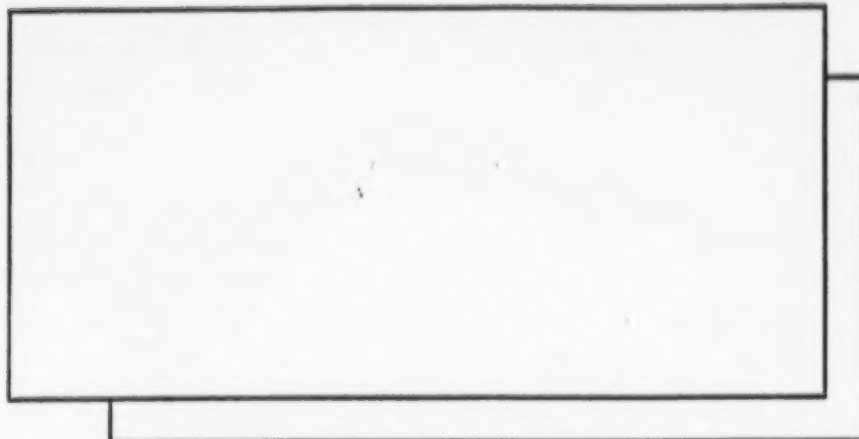
TO DO:

APPOINTMENTS:

TELEPHONE CALLS:

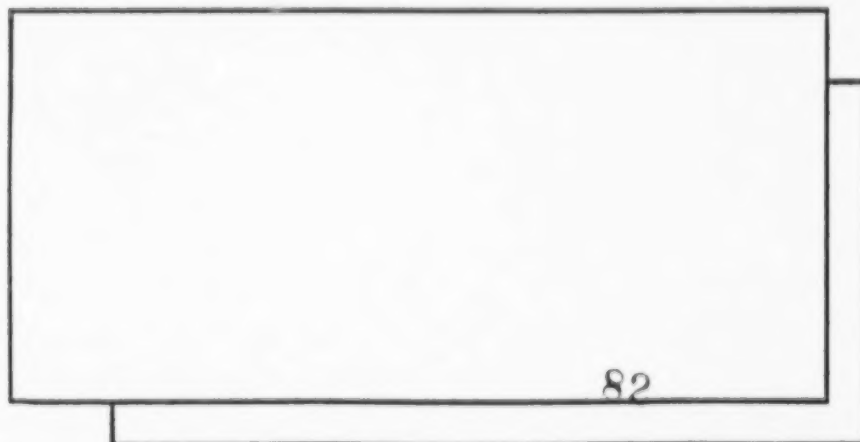
Ellen	Barbara	Home

START DATE _____



IN PROCESS

NEEDS DEVELOPMENT	NEEDS WORK
-------------------	------------



MUST DO

So much for the "Who" in our environment as possible tools to help you learn. What other potential resources exist all about you, libraries, museums, governmental as well as private agencies delighted to provide learners' tools to improve learning? On the next 3 pages headed respectively Libraries, Museums, Governmental/Private Agencies, please list as many as you can find that might prove valuable to you or your peers. Each page has columns to allow you to add to the name of the resources, its address, telephone number and any noteworthy additional information. Use the Yellow Pages of your telephone book to begin building your personal resource file. Turn to peers, family, and teachers to enlarge your list.

LIBRARIES

NAME / PHONE	ADDRESS CITY, STATE, ZIP	NOTES

MUSEUMS

NAME / PHONE	ADDRESS CITY, STATE, ZIP	NOTES

GOVERNMENTAL / PRIVATE AGENCIES

NAME / PHONE	ADDRESS CITY, STATE, ZIP	NOTES

So much for the "Who" and the "What" in addition to your Brain and Self as tools to help you learn. How about the conditions in which you best learn? Knowing these may also prove worthwhile to you as tools.

Circle your ideal studying conditions for studying in the following check-list:

Temperature: cold, cool, warm, hot

Light: bright, dim, overhead, lamplight

Sound: very quiet, quiet, background, noisy

Sight: no distractions, some color, much design

And now are you ready to develop your very own Learning Profile, your task for Notebook V?

NOTEBOOK V

My Learning Profile

In this Notebook, You are the writer, the author, the creator. All I am going to do is offer you some structure to help you build your very own model of your learning profile.

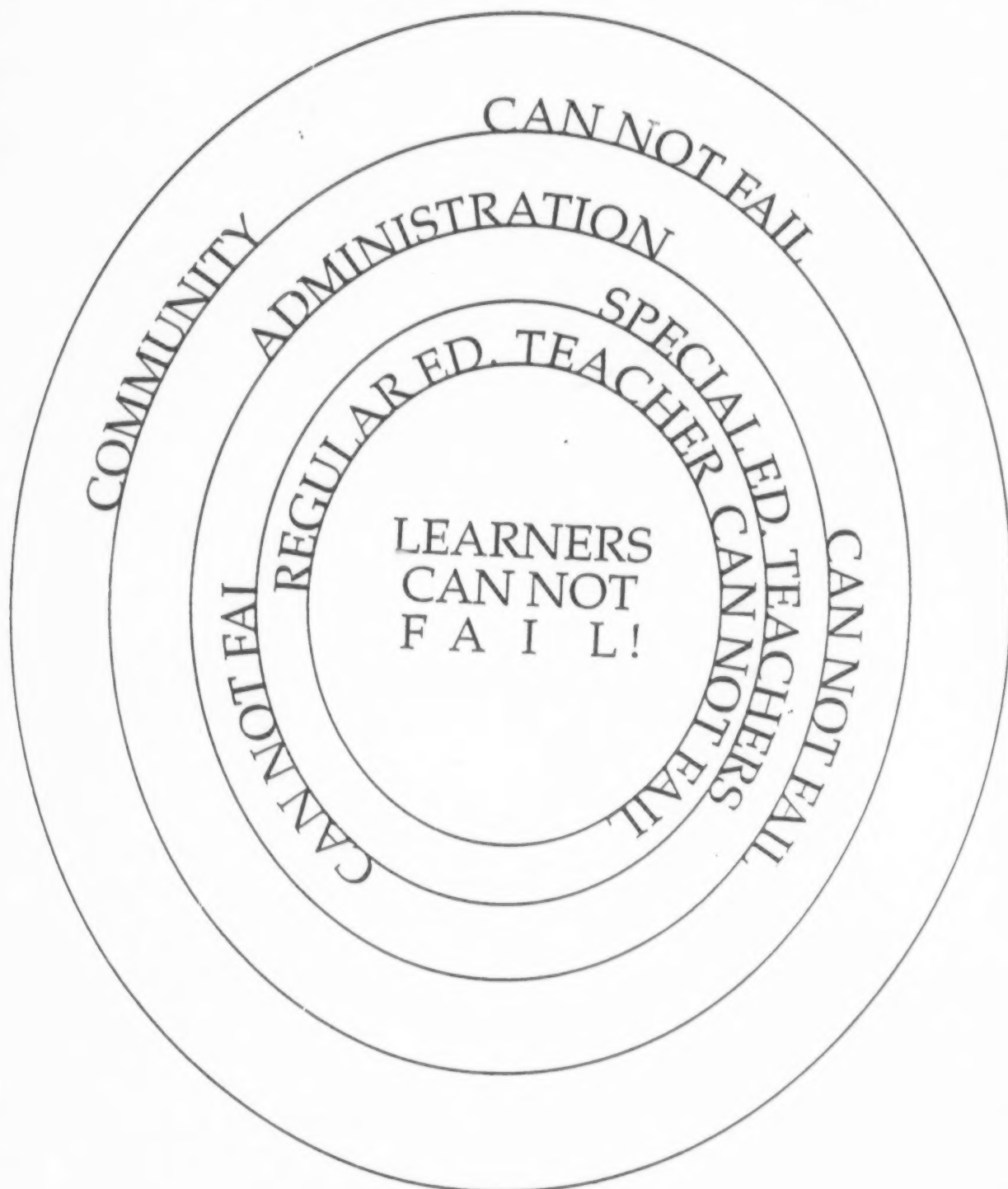
Before I do, however, let's take a minute or two to think a bit more about that word **model**. What is a model anyway? Have you ever made a model? from scratch? Have you built one from your own ideas? Perhaps you've built a motorized cart for a contest sponsored by General Motors or one of the other industrial giants. If you did, after the contest, did you redesign it? rebuild it? If you've experienced such model building, then you know what models are all about. I'm sure you can fill in the blanks in this definition of a model. A model is a way of expressing an _____. It is something you make and change time and time again as you improve your original idea. A model is never carved in _____.

Models are neat ways of getting your ideas in graphic form so that you can see them. Seeing your ideas in pictures and words, in models, make it easier to manipulate your ideas. That's what makes model building such fun. The models you've look at throughout these notebooks I've enjoyed building. Teachers and students who use them often ask questions about them causing me to create changes. Just last evening when I presented at a public school committee meeting one of my favorite models, which shows all the people in-

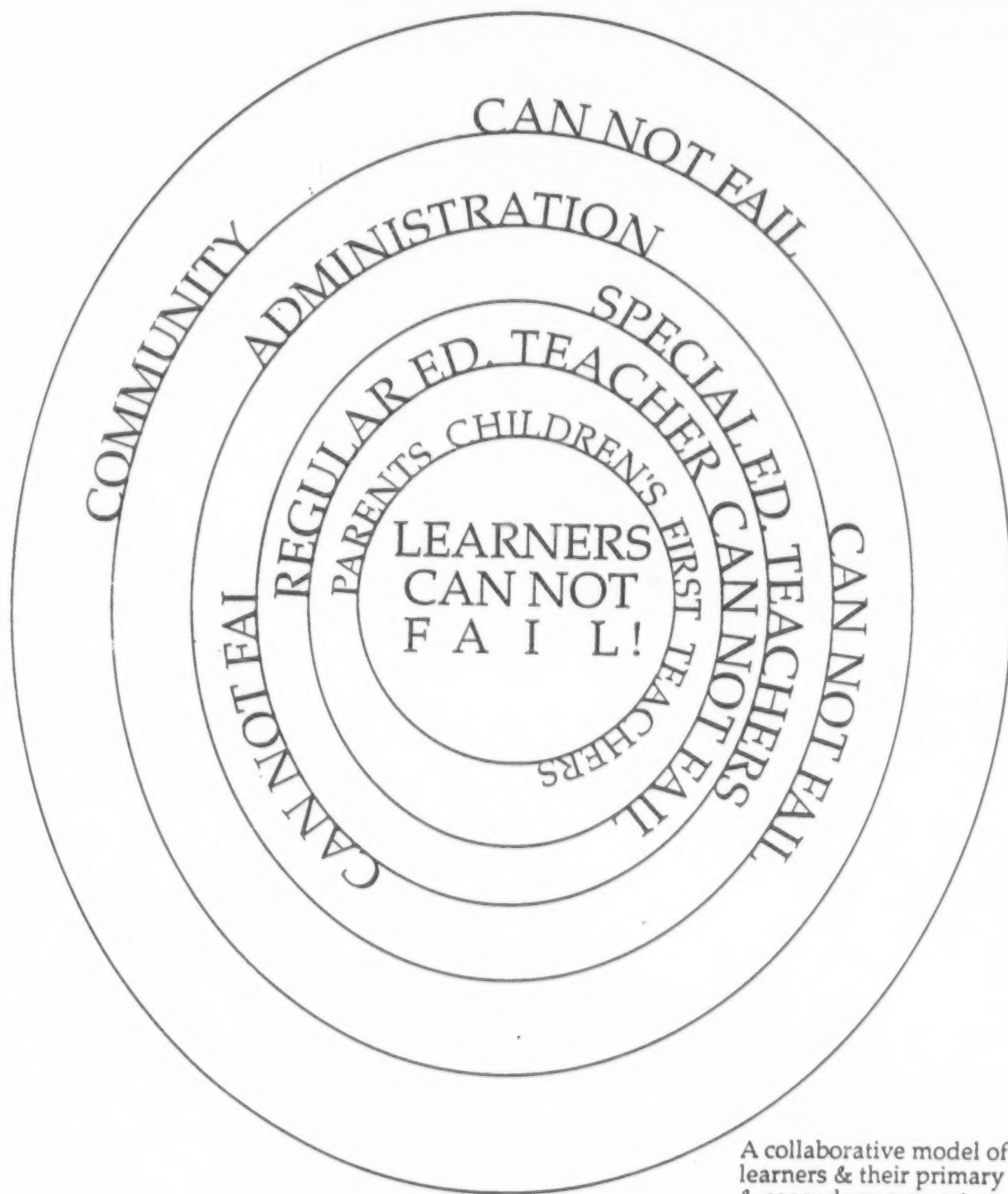
involved supporting learners so they will not fail, a parent in the audience asked where parents fit in. I answered that I had seen parents as members of the outer ring, the community (see the first model) following this page. Her question made me recognize that parents really needed more notice, since they were such a strong influence on children's learning and really children's first teachers. As a result of that parent's question, I changed my model as you can see in the second page following this one by adding another circle putting parents next to the Learners, even before they get to school.

I welcome your questions, comments and ideas about the models I have designed. More importantly, I hope you will enjoy building models of your own to express your ideas. This notebook provides you with the opportunity to build one incorporating your learning profile. I'll be happy to see and react to your models.

Model A



Model B



A collaborative model of learners & their primary & secondary support services.

Information gleaned from formal testing

Intelligence:

Name of Test: e.g. WAIS Date administered:
 My age: and grade: at time of administration

Scores: Verbal: Performance: Full Scale:

Verbal:	Performance:
Information _____	Picture Completion _____
Comprehension _____	Picture Arrangement _____
Arithmetic _____	Block Design _____
Similarities _____	Object Assembly _____
Vocabulary _____	Digit Symbol _____
Digit Span _____	

Rearrangement of Wais to Information Processing System

Directions: Insert test scores on the blank lines next to the test's name.

VERBAL (AUDITORY) _____ PERFORMANCE (VISUAL) _____

INPUT

INFORMATION _____ PICTURE COMPLETION _____

INTEGRATION

DIGIT SPAN _____ PICTURE ARRANGEMENT _____

SIMILARITIES _____ BLOCK DESIGN _____

OUTPUT

ARITHMETIC _____

OBJECT ASSEMBLY _____

VOCABULARY _____

DIGIT SYMBOL _____

Synthesis of informational processing scores:

Scores of 10 or above are to be recorded as strengths. Scores below 10 are to be recorded as areas needing strengthening.

Strengths

1. _____
2. _____
3. _____
4. _____
5. _____

Areas Needing Strengthening

1. _____
2. _____
3. _____
4. _____
5. _____

Measures of Basic Academic Skills:

1. Reading _____
2. Writing _____
3. Arithmetic _____
4. Fine Arts _____

AREA	SCORE				RATING	ED. PLAN
	Low	Average	High Average	Superior		
1. Verbal Abstract Reasoning (Similarities)					Superior High Average Average Low	Self initiated Self initiated & monitoring Relationships & thinking skills Relationships & thinking skills
2. Verbal Abstract Reasoning (Block Design)					Superior High Average Average Low	Self initiated Self initiated & monitoring Special organization Special organization
3. Common Sense Reasoning (Comprehension)					Superior High Average Average Low	Self initiated Self initiated & monitoring Relationships & thinking skills Relationships & thinking skills
4. Memory (short term) (Digit Span)					Superior High Average Average Low	Self initiated Self initiated & monitoring Memories - memory technique Memories - structuring
5. School Related Memory					Superior High Average Average Low	Self initiated Self initiated & monitoring Demonstrate relationship with short term memory Build understanding of base organized memory
6. Expressive Language (Vocabulary)					Superior High Average Average Low	Self initiated & monitoring Written language Oral. comm & written Lang. Oral. comm & written Lang.

AREA	SCORE				RATING	ED. PLAN
	Low	Average	High Average	Superior		
7. Arithmetic					Superior High Average Average Low	Self initiated Self initiated & monitoring Space Space (emotional?)
8. Verbal Perception (Picture Completion)					Superior High Average Average Low	Self initiated Self initiated & monitoring Space - details Space - details
9. Visual Sequencing (Picture arrangement)					Superior High Average Average Low	Self initiated Self initiated & monitoring Visual (cartoons) relate to language Visual (cartoons) relate to language
10. Parts - Wholes (Object Assembly)					Superior High Average Average Low	Self initiated Self initiated & monitoring Space - part to whole Space - part to whole
11. Visual Motor Memory (Digit Symbol)					Superior High Average Average Low	Self initiated Self initiated & monitoring Spatial organizational tasks Typing, handwriting technique (graph paper) visual imagery

Information from formal testing continued.

Self: e.g. Draw-A-Person, Tennessee Self-Concept Scale,
Meyer-Briggs

Name of test: _____

My age: _____ and grade _____ at time of admini-
stration

Scores: _____

Interpretation: _____

Physical: _____

Motor: _____

Vision: _____

Hearing: _____

Other: _____

Synthesis of findings from additional formal testing: _____

Strengths: _____

Areas needing strengthening: _____

Informal information gleaned from any of the following persons:

Teacher: _____ Date __/__/__

Information given verbally _____, in written form

Parent: _____ Date __/__/__

Information given verbally _____, in written form

Peer: _____ Date __/__/__

Information given verbally _____, in written form

Self: _____ Date __/__/__

Synthesis of findings:

Strengths:

Areas needing strengthening:

My Learning Profile synthesized from the foregoing formal and informal findings:

Rate yourself by placing an x in whichever of the three following columns seems most appropriate:

	Superior	Average	Poor
Input			
Auditory - listening			
Visual - noticing			
Reading - decoding			
Numbering - computing			
Spatial - left, right			
Integration			
Memory			
Auditory - short, long term			
Visual - sequencing			
Reasoning			
Common sense			
Practical Judgements			
Abstract			
Auditory			
Visual			

	Superior	Average	Poor
Reading - comprehending			
Number - conceptualizing			
Arts - conceptual design			
Motor - understanding			
Output			
Speaking			
Writing - language			
Handwriting			
Art			
Drawing - fine arts			
Organization			
Motor - execution			
Sports			
Individual			
Group			
Social - emotional			
Self-esteem			
Peer interaction			
Teacher interaction			
Other adult interaction			
e.g. authority figures			
Leadership			

Now connect your x's. Then turn your profile to face you. Your superior areas representing your strengths should be up top. Note them. Use them. Enjoy them. Let your world enjoy them. The x's in the average column should also be appreciated and the skills they represent shared. As for those identified as low, look in the next Notebook to find strategies to help the identified low areas move within the next year to the average column. You can. Many students before you have and continue to do so. Join that group of Learners. Success is Fun. With your own learning profile as your model, as a map and with strategies to empower you, you are on the road to success in learning.

We are with you to give support as you move along. We too will enjoy watching you as you are empowered to success. We, your teachers, get our "kicks" from your success.

NOTEBOOK VI

Strategies To Help You Learn

♪ **KEYNOTE 1:** Your learning strengths are the foundation for your educational design. Make sure you use at least 5 of them daily. Review Keynote 1 in Notebook 1. It described learning as an active process and you as the actor in it. Know your strengths and use them.

♪ **KEYNOTE 2:** The more you succeed at learning, the greater your hope for success. The stronger your Self, the "energizer of your learning" becomes, the more you will move from strength to strength as you continue to succeed.

Which strengths are you going to use to begin the next school task? For purposes of our discussion, let's look at the differing ways Mary, primarily an auditory learner, and John, primarily a visual learner, would begin effectively to study the following assignment: Using any prior knowledge you have about the U.S. Constitution whose 200th birthday is now being celebrated, and reading Chapter I from your current Social Studies text which focuses on the Amendments and the Bill of Rights, select one Amendment. Come to class ready to explain its purpose, its use up to this time and its possible use in your lifetime.

♪ **KEYNOTE 3:** Mary immediately digs into her memory pulling out all the things other teachers have taught her about the men who came to Philadelphia to frame a set of rules by which all the people could fairly be governed. She had heard

about Jefferson, Adams, and Madison and their many concerns, especially that the freedoms fought for in the American Revolution would be guaranteed to all our people. Mary had listened well to the many reasons these Founding Fathers had been concerned; for example,

- (1) the many problems they had with the mother country, England, and the tyrannical King George III,
- (2) how hard the colonists had fought for their freedom and
- (3) the real fear that a new government might also abuse its authority.

The designers of the Constitution wanted to be sure that their new government would be "of the people, by the people and for the people." They knew they needed rules to live by. They had so many concerns that they made many rules to assure that each individual citizen would have freedom. For Mary and John the question was how may I successfully learn them? For Mary, the beginning of the task is in remembering what she had listened to, heard, and earlier stored in her memory. Mary taps that stored memory as a foundation for her new learning.

- **KEYNOTE 4:** John also searches his memory for information about the reasons for the creation of the Constitution. What he discovers are visual images, pictures he has seen of Independence Hall in Philadelphia where James Madison is cautioning his co-writers that if the States had too much power and the Federal Government too little, we could not form "a more perfect union"; for individual states might break away as they did under The Articles of Confederation. In the picture John remembered Madison was working hard to make his point on a very hot, sultry summer day. The representatives of the 13 colonies seemed to be sweating as they worked. John's remembering that picture in some textbook used earlier refreshed his memory of how hard the designers

of the Constitution worked under very difficult conditions. He concluded they must really have cared. They wanted this document to give every individual the freedom they had fought so hard to get. John, like Mary, has a foundation for his new learning.

♪ **KEYNOTE 5:** John, knowing he is a visual learner, uses strategies to organize the information he is preparing for his assignment in a visual way. He seeks ways to see, to draw, to write, and to give visual structure to the information to be learned. Therefore John volunteers to be class recorder, for the class had decided to brainstorm the reasons for the creation of the Constitution. (For an explanation of brainstorming, see Keynote 28 in this notebook.) John moves to the blackboard to list the ideas his peers suggest.

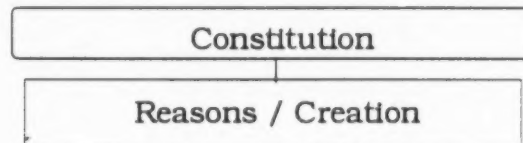
They begin by stating that the Articles of Confederation were not working; that they need to design a government that would work for them now, as well as for their children, their grandchildren and into the unknown future. Students noted the things that this new government had to prevent such as:

- states printing their own money
- states raising their own armies for their own protection, not for the common good
- states being unfair, one seeking greater power than the others, playing King of the Hill.

As the students brainstormed, positive goals for their new government evolved such as:

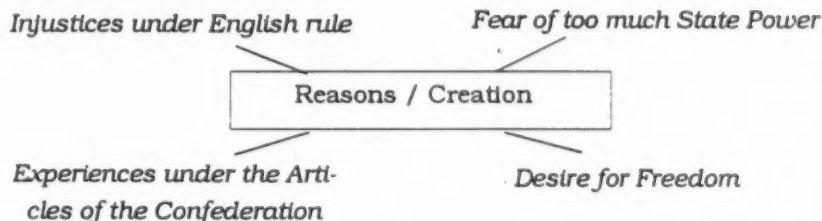
- to create peace
- to establish justice
- to promote domestic tranquility
- to provide for the common defense
- to promote the general welfare

🎵 **KEYNOTE 6:** As the class finished brainstorming and was ready to group their related ideas, John suggested a visual strategy he had learned for "Webb-ing" their ideas. In this visual strategy, one puts the main idea in a shape in the middle of a page like this;



All the related ideas are "Webbed" to the central one.

🎵 **KEYNOTE 7:** "Webb-ed" to each of the related ideas, one may add any number of associated ideas like this:



🎵 **KEYNOTE 8:** The process of "Webbing" associated ideas may continue to the finest set of details. One may always follow his path "seeing" a main idea and all its related ideas on one piece of paper. It is a marvelous organizational tool. Visual learners love this strategy, for it cuts through all the extra words usually found in conventional outlining. It gives the needed structure to the learner. Do try "Webb-ing". You'll like it. And more important, it will help you hang on to the information you are trying so desperately to learn. Additionally, you will hang on to "Webbed" information long term, not only for that Friday test.

♪ **KEYNOTE 9:** For the Johnnys, the visual learners in our classroom, the students whose auditory skills need development, a small group setting provides optimal opportunities. It is a place where lagging listening and speaking skills may develop. For small groups, ideally 3 or 4 students, give many opportunities to listen to others and to respond to their expressed ideas. Additionally, it is a setting in which students can learn to listen to their own words, and to notice both the verbal and non-verbal reactions of their peers. If you are a visual learner whose auditory skills are not so strong, try to set up small study groups. Within them and/or in any conversational setting, begin to ask yourself "Is there a better way for me to have put my ideas across? Could I have said it more clearly, directly, simply? Was I like a kitten walking around a dish of hot milk and not getting to the subject?"

♪ **KEYNOTE 10:** This process is known as self-critiquing. Try it. Develop it. It is a super way to improve your thinking and your oral expression of your ideas. Good oral language is foundational to good written language. If you want to improve your written language, start by listening and improving what you say.

♪ **KEYNOTE 11:** How about Mary whose auditory and organizational skills are her strength and whose visual-creative skills lag? Students like Mary have few school difficulties. They can easily do the things schools value most; do things in an orderly way, read, write, conform (give the one right answer), lead a group successfully. These areas reflect strengths valued not only by schools, but by society in general. Mary, make the most of your strengths; continue to use them effectively.

♪ **KEYNOTE 12:** As for your lagging visual skills, the road to their development is through visual imagery, designing, drawing, map-reading, playing games of chess, 3 D Tic-Tac-Toe, doing puzzles, using the camera to capture images about us.

These may be tasks you resist because they do not come as easily as do school-related tasks.

♪ **KEYNOTE 13:** Remember the most productive learners push information back and forth across the corpus callosum, thus using both left and right sides of their forebrains. So daily, Mary, set your sights on one of the above tasks or games. You will find that such endeavors will both stretch and enrich your thinking.

♪ **KEYNOTE 14:** In PAL, we have been using the Polaroid Camera to help auditory learners expand their visual worlds. Focusing on some pattern in nature, they begin to notice differences and likenesses they had never noticed before. They see shades of color, size, dimension and design that always were in their environment, but that they never allowed into their brains for processing. A new world has opened up for them through this simple medium of instant photography.

♪ **KEYNOTE 15:** Review your preferred location and time of day for studying. Incorporate that into your plan of action. If you work best during the early morning hours, try to get your most difficult work done then. Night owls, make sure you get your easy things done in the daytime. Then you'll use your most productive time, your night hours for your most difficult work. In like fashion, use your favorite work-space for studying.

So much for strategies, for time, for place for learning styles preferred. Whatever your preferences, know them and make use of them. Know also they are only beginning points in productive learning.

♪ **KEYNOTE 16:** You still need to process all the new information you want to learn. Is there a structure that all learners may find helpful in achieving that goal? You guessed it. That Informational Processing Model we talked about with its In-

put, Integration and Output may provide the desired structure. Let's see.

♪ **KEYNOTE 17:** Adopt the attitude of The Little Engine That Could. Know you CAN. Remember, you've got 90% of untapped brain power. (See Notebook II, Keynote 8).

♪ **KEYNOTE 18:** Input, This is the place and time when you begin actively learning by being:

1. open to the many, many things, people, images, opportunities around you;
2. selective in which bits of information you reach out to take in, check how you usually use your time; look back to Notebook I, Keynote 9.
3. making selections related to your goals?
4. relating your selections to your long-term goals such as being happy and being successful.

Having satisfactorily related your goals in 3 and 4 above, lets move to closer goals by completing the following:

In five years, I would like to be in college studying to be a teacher, lawyer, nurse, doctor, technician, in the health, recreational, library fields or on the job making money, or _____.

♪ **KEYNOTE 19:** Now let's look at how we use our time to achieve our goals. Look back to Notebook 1, Keynote 9. Match the time spent in each category with your earlier expressed goals. Do they make sense? Will your use of time lead you to accomplish the goals you want? What changes, if any, do you realistically have to make to achieve them?

♪ **KEYNOTE 20:** Having related your goals in 3 and 4 satisfactorily you should be ready to set your mind to listening and looking at the information (studying) necessary to reach those goals. At this point, check your L/R brain preference, Notebook I, Keynote 25. If Left, then words and books are going to be your best friends. If Right, look for pictures, graphs, maps to help you understand the words. If the assignment is in a text, also look to "Webb-ing" strategies as an assist to your understanding.

♪ **KEYNOTE 21:** So you sit down to study your assigned text. Five minutes later, you hear a police siren go by. You want to turn on your police scanner to see who's in trouble. Before you get to your radio, the telephone rings. It's Sue. She wants you to get a pizza with her.

How can you deal with the distractions all about and within you? Back to goals as a motivator and the time you've allocated for studying. But those goals of being a teacher, recreational therapist or whatever, are so far away. You need a nearer reward to keep you attending to the task you know needs to be done.

Set up your own reward system. Would you really like that pizza? Sure you would. More than that, you'd like some social time with Sue. Can you combine these desires with your goals? Can you manage your time to accomplish both? Of course you can.

♪ **KEYNOTE 22:** Look back to your time management tools for decision making in Notebook IV. You had planned your study time as 2 and 1/2 hours. It's now 7 o'clock and you've just begun to study. Suppose you arrange your study time in 2 one hour and fifteen minute blocks and use Sue as a reward at your break. Tell Sue you'll be ready at 8:15 to get pizza with her but that you'll need to be back to study by 9 so that you can finish what you planned to study by 10:15. Reasonable? Possible? Try it.

- ♪ **KEYNOTE 23:** Remember, you're in charge of your learning. That means you structure what and when you are going to take that new information in. But, in the process, be sure to build in rewards for yourself. Everyone works for a reward. that's what coffee breaks are in the business world.

No one can keep at the job endlessly. We all need breaks in which we reward ourselves for what we have accomplished and what we plan to accomplish.

- ♪ **KEYNOTE 24:** Needed breaks vary in length and in activity. For some, it's only five minutes and a drink of water, for others a jog around the block. The importance of the break is neither its length nor its activity; rather that after the break you feel rewarded and ready to continue your studying. For your own evaluation keep a record of your study and break behavior over a 3 day period. Perhaps this form may help as a sample. Adapt it towards your needs.

Day of week	Task	Study Time	Break Time	Reward
Monday	History/Cons			
Tuesday	Math Geometry			
Wednesday	Eng. Comp.			

At the end of the 3rd day, review your record and evaluate:

- Did you accomplish what you set out to do?
- Did the break/reward system help you accomplish the tasks you had?
- Which breaks were most helpful?
- Which rewards were least helpful?

Using your new knowledge, how are you going to structure Thursday's study time? Take a blank piece of paper and set your planned study / break schedule on it. Each week, re-evaluate and make appropriate changes for the next week.

This method of self-evaluation is used in industry to make an organization more productive. Let me know how it works for you.

Now that we've got our minds set for studying, for attending to a task without doing what a friend of mine, a farmer in Nebraska tells me he does to his donkey to get him to attend, "simply hit him on the head with a 2 by 4". Here's another secret:

♪ **KEYNOTE 25:** The brain is a pattern seeker. When you look or listen to new information, search for the differences in the new information from anything else you already know. Then find the likenesses in color, shape, size, dimension, sound, and number. As you do, note the patterns that exist all about us, for example, in leaves, that the four leafed clover is not so common as the three leafed one; that the seasons of the year have distinguishing characteristics; that the sequence of seasons reverse themselves south of the Equator and on and on. The more information whose patterns you notice, the richer your foundation for your thinking. That's probably why the scientist Francis Bacon in the 1500's suggested that all teenagers should travel for "Travel is broadening." It expands your experiences.

♪ **KEYNOTE 26:** But even in our own settings, we have resources to tap, people who have had experiences other than ours, peers, teachers, parents, grandparents. Use them. Ask questions. Answers to the questions what, where, when, how and why will broaden your vicarious, experiential base. See Notebook IV, Tools That Help Me Learn.

♪ **KEYNOTE 27:** We have other sources from which to input additional information as a foundation for our thinking and evaluation, T.V., radio, newspapers, magazines, libraries, and computerized retrieval systems. We're back to Robert Louis Stevenson's "The world is so full of a number of things."

♪ **KEYNOTE 28:** Another way of expanding your informational base is Brainstorming. Originally used in business to increase the number of alternative solutions to a problem, it has now become useful in classroom settings as well as in study groups. Brainstorming encourages each member of the group to contribute his ideas without fear of criticism. It is especially helpful for the student who is afraid to make a mistake. It relieves his anxiety to give the "one" right answer for it seeks divergent answers, favoring the right-brained learner and creativity. It shows that creativity involves making mistakes and learning from them.

Brainstorming may sound haphazard, but it has a definite structure and four basic rules:

- No ideas may be criticized during the idea-gathering period.
- Ideas do not have to be practical; the wilder the ideas the better. Wacky, offbeat, idealistic, just plain silly ideas are welcome.
- Strive for quantity; the more ideas the better.
- Combine. Brainstormers should combine ideas and improve "pickybacking" on the others' ideas.

To be most effective, brainstorming should address a specific

problem, such as litter in the schoolyard. One member of the group should be secretary, ideally a visual learner. See John, Keynote 6 in this notebook and record the ideas being generated on a blackboard so that others can see the list grow, can combine and improve them.

INTEGRATION

So you've taken in a wealth of information on the subjects being studied, be it the Bill of Rights of our Constitution or a geometric theorem. Are you ready to move up the cognitive ladder to make the ideas yours and to create new ideas of your own? Let's go.

But how am I going to remember all those bits of information I've now taken into my brain. Generally, we can add only 7+ or -2 things in our memory at one time. Yes, there are some secrets to help you store, remember and recall those bits of information.

♪ **KEYNOTE 29:** Special memory systems have been used since time immemorial. The Greeks names these memory systems Mnemonics, meaning mindful. On occasion you watch showpeople, who have mastered these systems, demonstrate their ability by remembering the names of everyone in a large audience having heard their names only once. You don't need to become such a showperson. However, you do need some structures to help you remember disassociated bits of information, lest they float away so that you cannot recall them when you want them.

One such system has you arrange a list of names you want to remember by first letter so that the first letters make a sentence. You probably learned these from your third grade music teacher when she wanted you to remember the notes of the scale, EGBDF, by teaching you that Every Good Boy Deserves Fudge or Every Good Boy Does Fine.

Perhaps you learned this one from your seventh grade Social Studies teacher who wanted you to remember the names of the five Great Lakes by arranging their first letters into a word you know:

HOMES

for

Huron - Ontario - Michigan - Erie - Superior

Try these tricks with some list you're trying to learn, like that of the names of the battles of the Civil War, such as Harper's Ferry, Antietam, Bull Run, Fort Sumter, Gettysburg, and Vicksburg.

 **KEYNOTE 30:** Mnemonics you learned even before you started school are rhymes, such as Peter Piper picked a peck of pickled peppers or Mary had a little lamb, it's fleece was white as snow, etc.

What this mnemonic device does in addition to having you listen to its rhythm is create pictures in your mind. The fancy word for this process is Visual Imagery. Can't you see Mary followed by her little white lamb approaching the schoolhouse? Your right brain can create these visual images for you. Just send the word or words you are trying to remember across your corpus callosum to your right brain for a related picture. For example, when studying Psychology, you may be trying to remember the name of one of the early inspirers of the science, Dr. Freud. Freud is a difficult name to remember. Try drawing a picture of the Dr. tending to one of his patients moaning on a couch. Insert stick figures with Freud's name and patient Dora's name. The funnier your picture, the more likely you are to remember it. Add some color to your picture. This also strengthens the image.

If you prefer right brain thinking, you probably use such techniques naturally. Those who prefer left brain thinking find

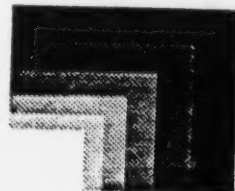
such techniques more difficult. Help them do it, right-brainers, for it will enrich their memories.

♪ **KEYNOTE 31:** Another mnemonic is one where you take bits of information you would like to remember, for example, the names of the 7 continents and put them visually in corners of a space very familiar to you, like your bedroom. You'll be able to pull them out (fancy name is retrieve) them when you want them.

You'll find mnemonics especially helpful for that Friday test when the teacher is just checking your memory of factual information.

If you are interested in more mnemonics, how about doing a research project on the subject? It would make a very interesting term paper for an English course. You might add pictures of related bits and pieces to your project. The photos might show the sequence of a story you had read. The pictures provide the base for noticing details, for remembering them as a base for discussion, for making comparisons and developing relationships as you move up the Cognitive Ladder achieving conceptual understanding.

♪ **KEYNOTE 32:** Begin by taking two facts that you now remember and do what you did earlier; notice how they are different and how they are alike. As you do it now, you are refining your observations, finding the common characteristics in the two items being compared, and their attributes.



How are these pictures different? alike? What do they have in common? What are their attributes?

Remember Jimmy and Andy's comparisons of the reasons the red ball was theirs in Notebook II? In similar fashion, you ask the question How are two things different, alike? You are now beginning to play with words, with antonyms (things that are not alike, opposite), things that are alike, the same (synonyms). Words that may help you compare may be similar, like, likewise, and some that may help you contrast are but, on the other hand, or conversely.

♪ **KEYNOTE 33:** Comparing and contrasting, finding common characteristics or attributes lead to categorizing, to grouping. Find the common characteristic in the following items: table, chair, couch, dog, lamp. Easy, isn't it. Each is a piece of furniture, except, of course, the dog. He just doesn't belong. Out he goes. He doesn't have the common characteristic of the group. He's not a piece of furniture. Do you see how comparing and contrasting leads you to grouping and categorizing?

♪ **KEYNOTE 34:** Comparing and contrasting are natural ways of thinking. You are continuously comparing and contrasting in school activities, when using words, building paragraphs, writing stories or poetry. When you read what authors have written, you compare the characters they have created, the settings, the mood of the story, and the authors themselves. In mathematics you are contrasting shapes, sizes, relationships, and distances as you move into problem solving. Whatever task you have to do, comparing and contrasting are keys to higher levels of thinking. Make them your habitual ways of thinking, for common characteristics exist all about you. They are there for you to discover. Linnaeus, the father of modern systematic botany, used these strategies to classify all nature into three kingdoms: animal, vegetable, and mineral. The common characteristic he focused on was their sexual systems.

As you continue to see relationships, finding attributes and things that don't belong, begin to ask additional questions, such as Why?, Why not?, What if? As you do, you will move to the higher processes of thinking, critically evaluating asking, "on the basis of my experiences, does this make sense? Could it happen? If not, why not, on and on as far as your imagination and creativity will take you. Try some other secrets at this level to clear your thinking.

♪ **KEYNOTE 35:** Discuss your ideas with your peers over lunch. Play teacher with them. Try out your ideas by getting their reactions. Ask them questions.

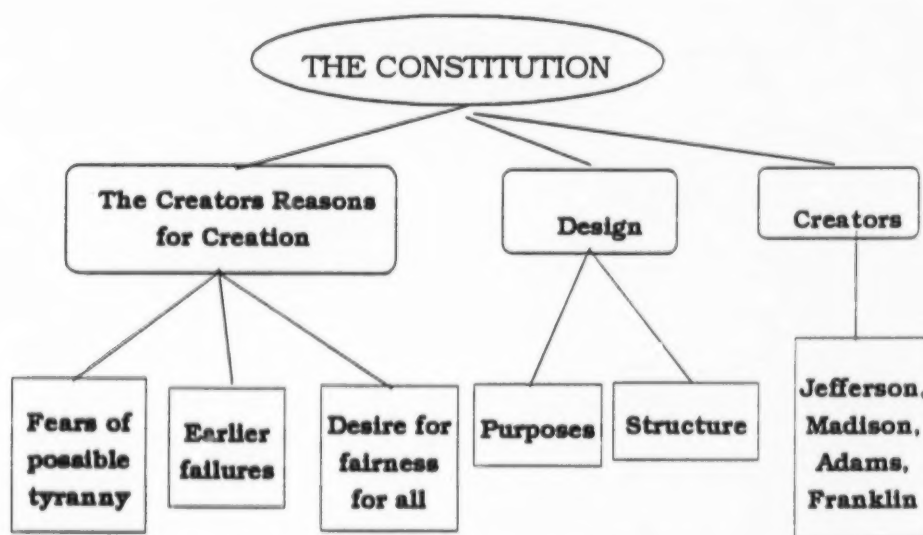
♪ **KEYNOTE 36:** Now add to your earlier repertoire of factual (what) and your conceptual (comparing and contrasting) questions still another kind of question known as problem solving questions. To formulate such a question, you create a situation into which you put a problem. Remember John and Andy out in the schoolyard fighting over the red ball? That was a problem in which the teacher helped them reason whose ball it was.

Try structuring a situation in which you place people trying to solve a problem, for example, Our Founding Fathers, Jefferson, Adams, Franklin and more trying to write a Constitution with which the people could be fairly governed.

♪ **KEYNOTE 37:** Another technique particularly helpful in seeing relationships is called by many names, linking, mapping and webbing to name a few. Of course being named Webb, I am partial to the Webbing name. John used this strategy earlier in Keynote 6. Let me explain how you develop such a web in relation to our earlier mentioned problem of the design of a Constitution by our forefathers. Start with the main idea at the center of the web, to it attach additional ellipses, any important related ideas such as the Creators, their reasons for creating it, and its design.

To each subset of ideas you made, add additional related facts you consider important enough to record. for example, to the fears of our forefathers in writing our Constitution, you might want to add such items as man's unfairness to man, possible warring between the states, some states' desire to be more powerful than others or than the whole union. Following in this manner you can add any number of new relationships to the smallest associated attribute or characteristic.

To distinguish each group of subsets, change the shape of the enclosing figure, for example, from ellipse to square, to circle, or change the color of your writing tool. Changing color and shapes makes your visual web much clearer. It will help you present your ideas by starting either at the center, at the main idea to process, or by starting at the outer edge and wending your way back to the center to the main idea. Try it. You'll find this "Webbing" helps you clarify your thinking so that you can present it orally or in written form clearly to your audience.



♪ **KEYNOTE 38:** Other ways of finding the structure in what you are reading or listening to include conventional outlining which left-brained learners, the Marys of our world, prefer. See, on the next page how our web would look outlined.

I. The Constitution

A. Reasons for creation

1. Inadequacy of Articles of Confederation
2. Unfairness to members
3. Inequity between the states
4. Possible warring between the states
 - a. to be more powerful than any other state
 - b. to be more powerful than the union

B. Creators

1. Jefferson
2. Madison
3. Adams
4. Franklin

C. Design

1. Purposes
 - a. to form a more perfect union
 - b. to provide for the common defense
 - c. to foster domestic tranquility
 - d. to have a government for the people and by the people
2. Structure
 - a. preamble
 - b. structure
 1. Legislative
 2. Judicial
 3. Executive

Which structure are you more comfortable with, the web of interrelated ideas or the linear, sequential outline? Chances are, if you prefer visual learning, you'll be happier with the web, that if you prefer left brain learning, you'll like the outline. Use the one you prefer most of the time. However, please try the other style until you can be comfortable with it. Right brainers, move your pictures to words; left brainers your words to pictures. Remember you have two hemispheres ready to cooperate in your forebrain.

♪ **KEYNOTE 39:** The most effective learners use their left and right brains cooperatively. Try to do so and your products will be enriched. Throw out the words, "I can't" from your vocabulary. You will improve as you practice whichever skill is lagging in its development. Think of Olympic swimmers, concert pianists and the innumerable hours they practice to perfect their skills.

♪ **KEYNOTE 40:** Learning takes time and effort. When you start remembering and relating main and associated ideas, you will find yourself arranging them in order. The fancy name for doing that is sequencing. The more you sequence your ideas, the more order you will find in your world.

Which brings us to getting the most out of what you read. How do you approach a new textbook? Look at the number of pages and groan? Instead, try these strategies:

♪ **KEYNOTE 41:** First, read the title of your book. Let's suppose it's *A Tale of Two Cities*. Think about the title. Question what two cities the author might have written about? That leads to other questions. Who is the author? Have you ever read anything else written by him (Dickens)? Why do you suppose he wrote the book? When I've asked that question, students have often answered, "to make money". Maybe so. But not all authors make money. They write, even as I have written this book, because they feel they have something to say about something in which many other people may be inter-

ested. If they tried to present their ideas orally, they could only reach as many people as could come to their lectures. With a book, hopefully they can reach those who are not within earshot and therefore not able to come to the lectures. Besides lectures are a one shot deal. Books can be read and if worthwhile, re-read. As Chaucer said it in early English, "In Bookes for to rede I me delite".

Then what do you suppose is so important in this book that the author wants to talk to as many others as s/he can reach, to you?

♪ **KEYNOTE 42:** Let's look at the Table of Contents to find out. Anything there you already know something about. Good. Jot it down. Maybe you know everything the author is going to tell you. Or maybe each chapter is going to give you some new information of which you never before were aware.

Try reading Chapter I having already jotted down what you think you already know on that subject. As you read, add the new ideas the author gives you. Worth reading? Evaluate as you read. Web the material or outline if you prefer so that at the conclusion of the chapter you can write a summary of the important ideas expressed.

♪ **KEYNOTE 43:** Summarizing is a great way of reviewing (taking another look) at the ideas expressed by the author in that chapter. It helps you draw conclusions readying you for more critical evaluation of what you have read.

♪ **KEYNOTE 44:** If any portion of the reading doesn't seem to make sense to you, try paraphrasing it. Paraphrasing means putting into your own words each and every idea the author has stated. Paraphrasing is very different from summarizing. When paraphrasing, every idea expressed by the author is translated into your own words; when summarizing you review (put together) the author's major ideas. Paraphrasing is

especially helpful when trying to understand difficult or fuzzy ideas.

♪ **KEYNOTE 45:** And now up the Cognitive Ladder even higher, to analysis (taking apart) and synthesis (putting together). Analysis and synthesis are the two thinking skills you must use when problem solving at a conceptual level. Let's see how we use them when evaluating the Constitution as a design for government for a democracy. Having researched the subjects you webbed or outlined, you now are ready to critically evaluate its value as a design of government for a democracy. You have examined each major category such as Reasons for its Creation. You broke each major category into pieces (analysis). You examined each reason for developing the Constitution; reading in the library, writing your ideas down, discussing your findings with your peers, arguing the pro's and con's, perhaps even thinking them through in role-playing situations. You are now ready to put together, to synthesize the pieces you believe make for effective democratic government. Using analysis and synthesis you have critically evaluated, problem-solving so that you are ready to defend your position orally and in written form.

♪ **KEYNOTE 46:** Those who prefer right-brain thinking may even create a new design; for as you recall, many right-brain thinkers are our divergent, innovative thinkers. Their ideas need to be heard, written down and sensitively evaluated. Too many creative thinkers have not been accepted by their societies. Remember the struggles Gallileo had because he had a new idea about how the sun operated.

♪ **KEYNOTE 47:** Now you are building, understanding and making concepts of your own, not superficially for the Friday test, but forever. Translate that ability in each class you attend. Here's another form to help you. Take an 8 1/2 by 11 piece of paper. Make a vertical line down the middle of the page, thus subdividing it into two columns. Head the first column Concepts I Understand, the other column, Concepts I

don't Understand (Fuzzy). As you sit in each class listening, "Webbing", outlining or discussing, record in the first column the concepts presented that you really understand; in the other column those that are not clear. The trick is to clarify the fuzzy concepts by asking questions of peers and/or teachers, researching in the library until you can move the fuzzy concept from the right hand column to the left because you really understand it. Do not be satisfied until the concept is yours, to move around wherever and whenever you so desire. (Remember Keynote 1 in Notebook 1. Learning is an active process.) Here's a copy of a model I made. Change it to make it work for you.

Date/Subject 3/5/85 - Social Studies

Concepts I Understand

The Constitution/1787

Concepts I Don't Understand

The Constitution/1989

♪ **KEYNOTE 48:** What other ways can you improve your integration of your learning? Hear what some PAL students have said about the ways they learn best. Keep refining your own understanding of your best ways of learning.

Paul says, "I need to see diagrams, Webs and other visual representations in order to make sense out of what I hear. I must absolutely take notes or my memory does not retain what I have heard. I also need to read in a quiet spot and make up my texts to highlight what is important. Ideally I am able to discuss information with my peers. That helps me understand the material. Then I know it's mine."

Susan says, "My learning style reflects my strengths and weaknesses in each area. I rely heavily on my auditory sys-

tem to organize information I've received through my senses. An inner auditory language, an internal dialogue enables me to clearly sort, integrate and synthesize information. Verbalization helps me clarify my ideas, generate new ones and analyze information from different perspectives. I interpret and express information auditorily regardless of the stimuli presented or the mode of expression required. For example, I "hear" what I read and write and internally verbalize directions presented."

Marcia says, "Lectures are difficult to understand so I have to re-listen to them by taping them and then editing them in my notebook. The tape also helps me to know the teacher's language and the way he describes what the text is saying. To know how he says things helps me when I am being tested. I am learning the language of the test. In doing a written assignment, I can use the tapes to help me understand the language of the course. It also helps me use the technical terms of the course."

Jane says, "It is important for me to get an overall framework for the subject matter to be learned. I read the preface to find out the author's intent and the setup of the text. I read the table of contents and then scan the textbook to get a "feel" for the language of the course. I approach the assigned chapters by reading the summaries first and pulling out key words which I write in the margin. I read the chapters quickly not worrying about total comprehension. Then I go back to the information that is important. I "Webb" the contents, talk them over with others, force myself to refine my thoughts by putting the ideas down in writing and then enhance my learning by teaching those same concepts to others."

How about writing a paragraph about how you learn? Here's some space to do that.

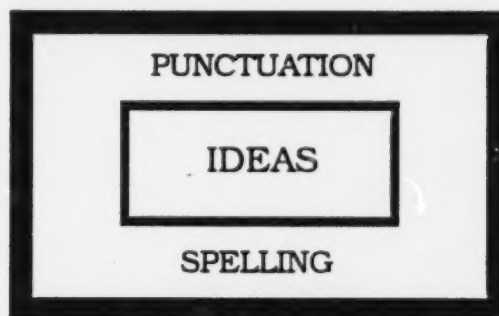
♪ **KEYNOTE 49:** When you have successfully sorted and ordered your ideas, you are ready to express your sound ideas in written form. Believe it or not, research tells us that the major problem with American students' writing is not their spelling, not their grammar, nor even their punctuation as many teachers believe and spend endless hours trying to teach. Rather, it is the writers' lack of clarity of thinking that is the cause of their poor writing.

Time would be better spent in our classrooms allowing students to express their ideas, to critique each others ideas as they conversationally share them, and to learn to self-critique as they clarify their ideas in preparation for written expression. In too many classrooms, teachers still do 90% of the talking. Research clearly and loudly tells us that students must do the talking in order to develop their language. Language, like playing the piano or playing tennis, must be played (practiced) in order to be improved.

♪ **KEYNOTE 50:** Ask your teachers if you may work in groups in class to discuss what you have read or researched. That way you will clarify your concepts, build sound understanding, and the necessary foundation for good writing.

Mark Twain is reputed to have said, "I would not respect any gentleman who could not spell one word at least three different ways." Twain was a creative genius. His ideas were so good he probably could get away with inventive spelling. Most school teachers unfortunately have the red marker ready for misspellings before looking for creative ideas. As a student, try to keep spelling in perspective. Use all kinds of aids to help: friends, spell-check, dictionaries, thesauras on the computer, etc.

- ♪ **KEYNOTE 51:** Know your ideas are most important. Make sure they are clear and stated in an orderly way as you present your verbal pictures. Recognize punctuation and spelling as frames of your pictures. A top-notch presentation will have great ideas in a first-rate frame. Use all the tools and people available to you to make your presentations top-notch.



- ♪ **KEYNOTE 52:** Having built your sound ideas, get to a word processor and let your ideas flow. Don't begin to edit until you've got your ideas all out. I am making the assumption that in most schools today, students have become familiar with the marvelous tool, the computer. If that is not true for you, quick like a bunny, get yourself in a word processing course. (Not a course in Basic or Fortran, but in word processing for purposes of writing). Developing skill at the word processor will save you time, give you a visual image of your ideas so that you will be able to clean them up without having

to re-read your own "hen scratches", (forgive me) your handwriting.

♪ **KEYNOTE 53:** Having freely expressed your ideas on the screen of your word processor, it is time to move your cursor to improve your style and format. The following structure may prove helpful to you:

Introduction: in which you state what it is you are going to talk about, for example, what you are planning to investigate or what you are going to report.

Body: in which you state all the information you have gathered on the subject investigated or researched.

Conclusion: in which you review what you have learned abstracting your conclusions and asking new questions for further research.

Then return to each section, review each paragraph checking the first sentence for the expression of a major concept. Are all other sentences in that paragraph related to that major concept? If so, fine. Go ahead doing more of the same. If not, this is the time to rearrange by cutting and pasting words, phrases, and sentences so that they relate to the major concept expressed in your first sentence.

This is the time when being able to move the screen forward and backward allows you to read and re-read your paragraphs to check their relationship and appropriateness in the master format of introduction, body, and conclusion. Sometimes you may want to move whole blocks of information. That's what you'll be able to do with your cut and paste keys without having to wade through your own handwriting and actually cut parts of your draft with a scissor before taping in another section. What a time saver the word processor is as you revise and improve your written product. However, even using a word processor, revising is a slow and time consum-

ing process. Be patient with yourself as you give it your best. The more you do it, the better you will become at it. Remember those Olympic heroes.

Final editing has to do with punctuation and spelling. Reading aloud and pausing as appropriate should help with the punctuation. If your word processor has a spelling checker, you're in clover. If not, the dictionary, the Thesaurus, peers, and teachers are potential aids in the correction of one's spelling.

 **KEYNOTE 54:** Test-taking is the way schools continuously measure what you have learned. Some of the tests given measure what schools all should be about, Children's Thinking. Most such tests are in essay form and take much time to correct and constructively critique. Students who have had opportunities to discuss, to question, and to think, enjoy essay tests for they give students opportunity to express their sound ideas.

More frequently, teachers select the short answer, multiple choice test. They are so much easier and faster to correct. Although it is possible to construct tests to measure thinking and problem solving abilities, more frequently the questions asked are at the lower levels of factual thinking. They call for memorizing much of the material presented in class or in one's text. To prepare for such tests, look back to Keynote 29 in this Notebook for mnemonics to help you remember disassociated information.

In preparing for tests, ask your instructor which style test you will be having. In response to his possible question, "Why do you want to know?", suggest the differences in preparation necessary. Preparing for essay tests is very different than the mnemonic preparation for the multiple choice test. The essay test calls for movement up the cognitive ladder, from knowing concrete bits of information to comparing and categorizing them, to analyzing and synthesizing, to abstracting from that

body of information conclusions, reasons and inferences. Essays demand real conceptual understanding. The primary target in preparation for the multiple choice test is mastery of information, remembering it and being able to retrieve it in answer to the questions asked.

In any event, regardless of which type of exam for which you are preparing, regardless of the amount of time spent in preparation, you must still deal with your feelings about exams. Remember Alexander Dumas's poem about one who doubts himself defeating himself. So with exams. Those who enter an exam room feeling they will fail, often put their hind-brains in action, thus freezing their thinking abilities and insuring their failing the exam. (See Notebook II, Keynote 10)

♪ **KEYNOTE 55:** One needs to look at an exam as an opportunity to show what he knows, what he has learned, rather than an opportunity to be tripped by the examiner. How can you do this if you really fear exams?

1. Study regularly for understanding, building sound concepts, and clarifying fuzzy ones. Refer back to strategies on integration, this Notebook, Keynote 47.
2. Review in ample time to be able to seek answers to questions when understanding still is not clear.
3. "Webb" or outline the major concepts studied and their related ideas.
4. Orally present your "Webb" or outline.
5. Know what you know.
6. Know that you know.

7. Relax before your exam. Use physical exercise, relaxation exercises, and rest to clear your mind just before entering the exam.

8. Enter and show what you know in answer to the questions asked. Make sure you have read the question and understood what it is asking for. e.g. Compare and contrast the causes of the Vietnam and Nicaraguan Wars. Often poor students answering such a question will list the causes of each war and wonder why they failed the question. Do you know why? What had they not done? Write it down please by filling in the missing words in the next sentence. They had not _____ nor _____ the causes of the two wars. Make sure your answers speak to the questions asked.

9. After the examination, when you have your exam back, critique your answers, your teacher's comments. Discuss with your peers, with your teacher, so that you can appreciate what you do know and what you yet need to add to your knowledge.

♪ **KEYNOTE 56:** Testing when used effectively can lead us to new learning.

♪ **KEYNOTE 57:** Having read this notebook once, re-read it starring the strategies you feel would be useful for you. Then check the strategies you have chosen against your learning style - strengths and areas that need strengthening listed in Notebook V - Your Learning Profile. How is the match? Surprised? Keep on recording and evaluating how the chosen strategies work, dropping what does not work, trying another strategy or adapting one already tried. Use copies of the next page to keep track of your strategies. Good Luck.

LEARNING STRATEGIES

Date / /

Learning Need

Strategy chosen

Works very well

Medium

Not at all

NOTEBOOK VII

Where I Have Been, Am, And Am Going

Where I Have Been

As I look back on my school days, I remember the beginnings when school promised to be a new adventure, a time and place to give me new opportunities to explore.

I remember even more graphically when I first got into school difficulty in grade ____ . The problems I had were in learning to _____ , to _____ and to _____.

Other early memories were _____
_____.

As I moved along in the grades I remember with nice, warm feelings those teachers who supported me in my efforts to learn, who respected my ability to think:

Name of Teacher	Grade Level
1. _____	_____
2. _____	_____
3. _____	_____
4. _____	_____

I remember with anger those teachers who were destructive of me, who saw little value in me or my thinking ability:

Name of Teacher	Grade Level
1. _____	_____
2. _____	_____
3. _____	_____
4. _____	_____

Also, I remember those who were indifferent, those who didn't care whether I was or was not in class:

Name of Teacher	Grade Level
1. _____	_____
2. _____	_____
3. _____	_____
4. _____	_____

Where I Am - SELF EVALUATION

At this point perhaps you'd like to do some self evaluation.

A. Today I understand what my learning strengths are and how I can best use them:

My Learning	My Use of Them
1.	
2.	
3.	
4.	

B. The areas that I need to strengthen are:

1.	
2.	
3.	
4.	

C. List 4 new strategies you are using to meet your learning needs.

1.	
2.	
3.	
4.	

D. List 2 new feelings you are experiencing as a result of your new experiences.

1. _____

2. _____

E. In the following self-evaluative statements, check where appropriate:

1. I ____ see ____ (do not see) myself working in a collaborative effort with my peers so that each of us may more effectively learn our coursework.

2. Socially as a team member contributing to my society I

____ see ____ (do not see) myself with my peers at play

____ see ____ (do not see) within my family

____ see ____ (do not see) within my world at large

Where Am I Going

Look back in Notebook VI to the section we did on goals in Keynote 18. Having filled in 4, now add an even closer set of goals

1. In one year I would like to have accomplished the following:

a. found a new special friend

b. established a field of interest for my coursework

c. _____

d. _____

2. In one month I would like to have completed:

a. reading a book

b. doing a project

c. _____

d. _____

3. In one week I would like to have:

a. written in my journal

b. begun a new book

c. begun a letter to a friend

d. _____

e. _____

4. Today I would like to:

a. _____

b. _____

c. _____

Here are ten reflective keynotes to move you towards those goals we share with you of wanting to become competent, effective and independent.

- ♪ **KEYNOTE 1:** Reach out, seek what you want from the numerous resources, human and material about us in our respective worlds.
- ♪ **KEYNOTE 2:** Sort what you take in noting its patterns, its distinctive features, its differences from all else and similarities with all else in your world.
- ♪ **KEYNOTE 3:** Compare, contrast, associate. Build relationships.
- ♪ **KEYNOTE 4:** Questions the what, where, when, and why of each experience.
- ♪ **KEYNOTE 5:** Hypothesize questions and answers developing your ideas from them.
- ♪ **KEYNOTE 6:** Test them out. Try them on for fit by talking about them with peers, teachers and parents.
- ♪ **KEYNOTE 7:** Evaluate your ideas helping yourself by writing them down.
- ♪ **KEYNOTE 8:** Review, critiquing your ideas alone or with others.
- ♪ **KEYNOTE 9:** Act on your ideas. Do something as a result of your conclusions.

♪ **KEYNOTE 10:** Express your feelings about the product and the process. Following Polonius's advice to his son Laertes as he set off to explore the then known world in Shakespeare's Hamlet "This above all to thine own self, be true. Thou canst not then be false to any man."

Know there is an army out there willing to help you as you move towards personal success becoming a truly contributing member of our society. Count us in among those ready, willing and able to assist.

Sincerely,

Gertrude M. Webb, Ed. D.

Gertrude M. Webb, Ed. D.

Hot Line telephone number where I can be reached is: (617) 893-6250.